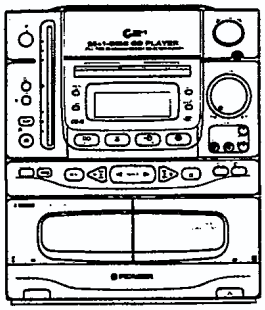
Service Manual

PIONEER®
The Art of Entertainment



ORDER NO.
RRV1429

STEREO FILE-TYPE CD CASSETTE DECK RECEIVER

XR-P760F

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	XR-P760F		
KU	○	AC120V	————————
KC	○	AC120V	————————
DD	○	AC110–127V/220–230V/240V	With the voltage selector
DL	○	AC110–120V/220–230V/240V	With the voltage selector
YPW	○	AC240V	————————

- **For the circuit and mechanism descriptions, refer to the service guide RRV1430 for XR-P760F.**

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

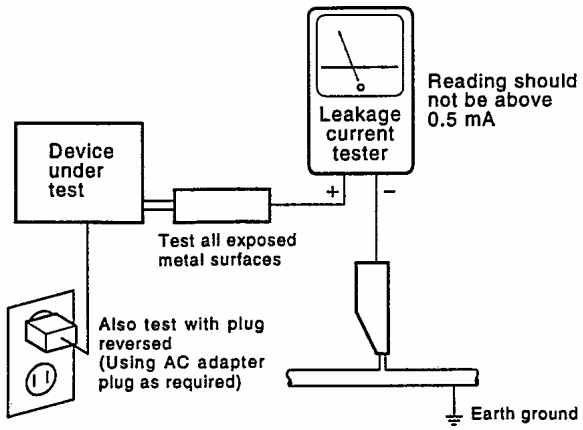
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Leakage current tester
Reading should not be above 0.5 mA
Device under test
+
−
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage , etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

(FOR EUROPEAN MODEL ONLY)

VARO !
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING !
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

LASER
Kuva 1
Lasersateilyn varoitusmerkki

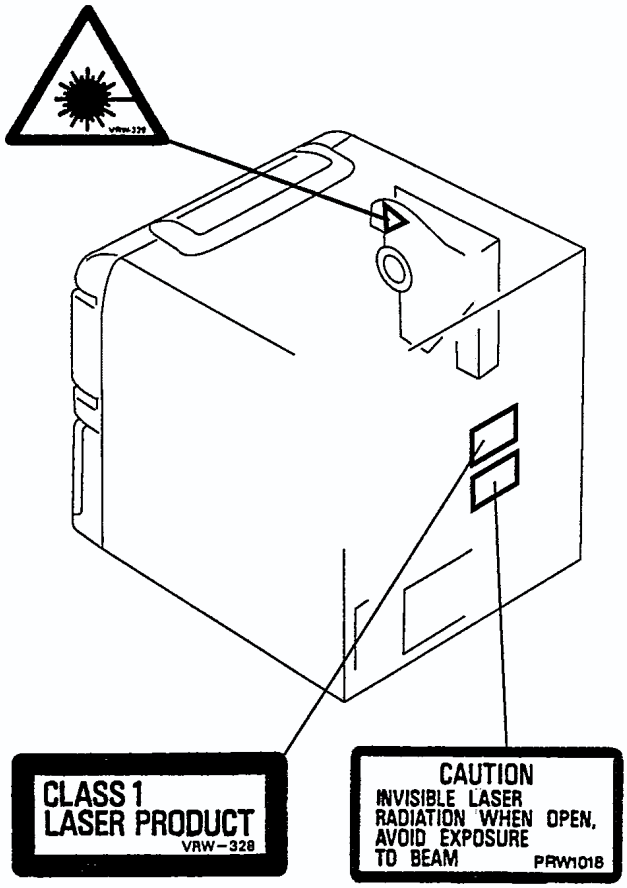
WARNING !
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780 – 785 nm

LASER
Picture 1
Warning sign for laser radiation

LABEL CHECK (for DL and YPW types)



Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on $\overline{\text{CLMP}}$ terminal side ($\overline{\text{CLMP}}$ signal is OFF or high level.) Thus, the interlock will no longer function if the switch (S651) is deliberately set to $\overline{\text{CLMP}}$ terminal side. (low level)
   The interlock also does not function in the test mode*.
   Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* *Refer to page 74.*

2. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

- *Parts marked by "* NSP *" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "* ● *"are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

2.1 PACKING

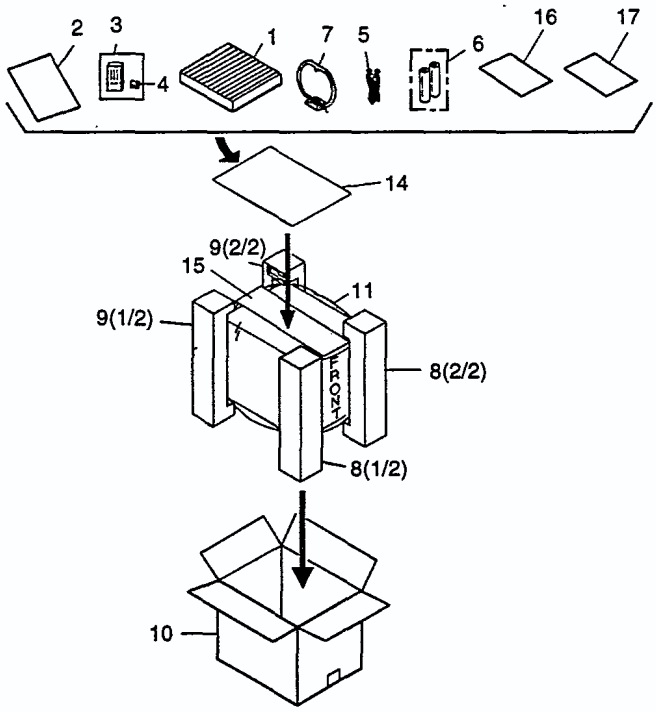
■ Contrast of XR-P760F/KU, KC, DD, DL and YPW

XR-P760F/KU, KC, DD, DL and YPW have the same construction except for the following:

Mark	No.	Description	Part No.					Remarks
			KU type	KC type	DD type	DL type	YPW type	
	2	Operating instructions (English)	ARB7071	ARB7071	Not used	Not used	ARB7071	
	5	FM antenna	ADH1017	ADH1017	ADH1016	ADH1016	ADH1016	
	10	Packing case	AHD7230	AHD7230	AHD7232	AHD7232	AHD7289	
	14	Poly. bag	DHL1097	Not used	Not used	Not used	Not used	
NSP	14	Poly. bag	Not used	Z21-040	Z21-040	Z21-040	Z21-040	
	16	Operating instructions (French)	Not used	ARC7116	Not used	Not used	Not used	
	17	Operating instructions (English, Spanish, Chinese)	Not used	Not used	ARC7112	ARC7112	Not used	

■ Parts List for XR-P760F/KU

Mark	No.	Description	Parts No.
	1	CD CASE RACK	AMR7066
	2	OPERATING INSTRUCTIONS (English)	ARB7071
	3	REMOTE CONTROL UNIT (CU-XR020)	AXD7068
	4	BATTERY COVER	AZA7050
	5	FM ANTENNA	ADH1017
	6	BATTERY (R03, AAA)	VEM-022
	7	LOOP ANTENNA	ATB7004
	8	FRONT PAD LR	AHA7094
	9	REAR PAD LR	AHA7095
	10	PACKING CASE	AHD7230
	11	PACKING SHEET	AHG7003
	12	.....	
	13	.....	
	14	POLY. BAG	DHL1097
	15	CAUTION CARTON	AHD7285



2.2 EXTERIOR

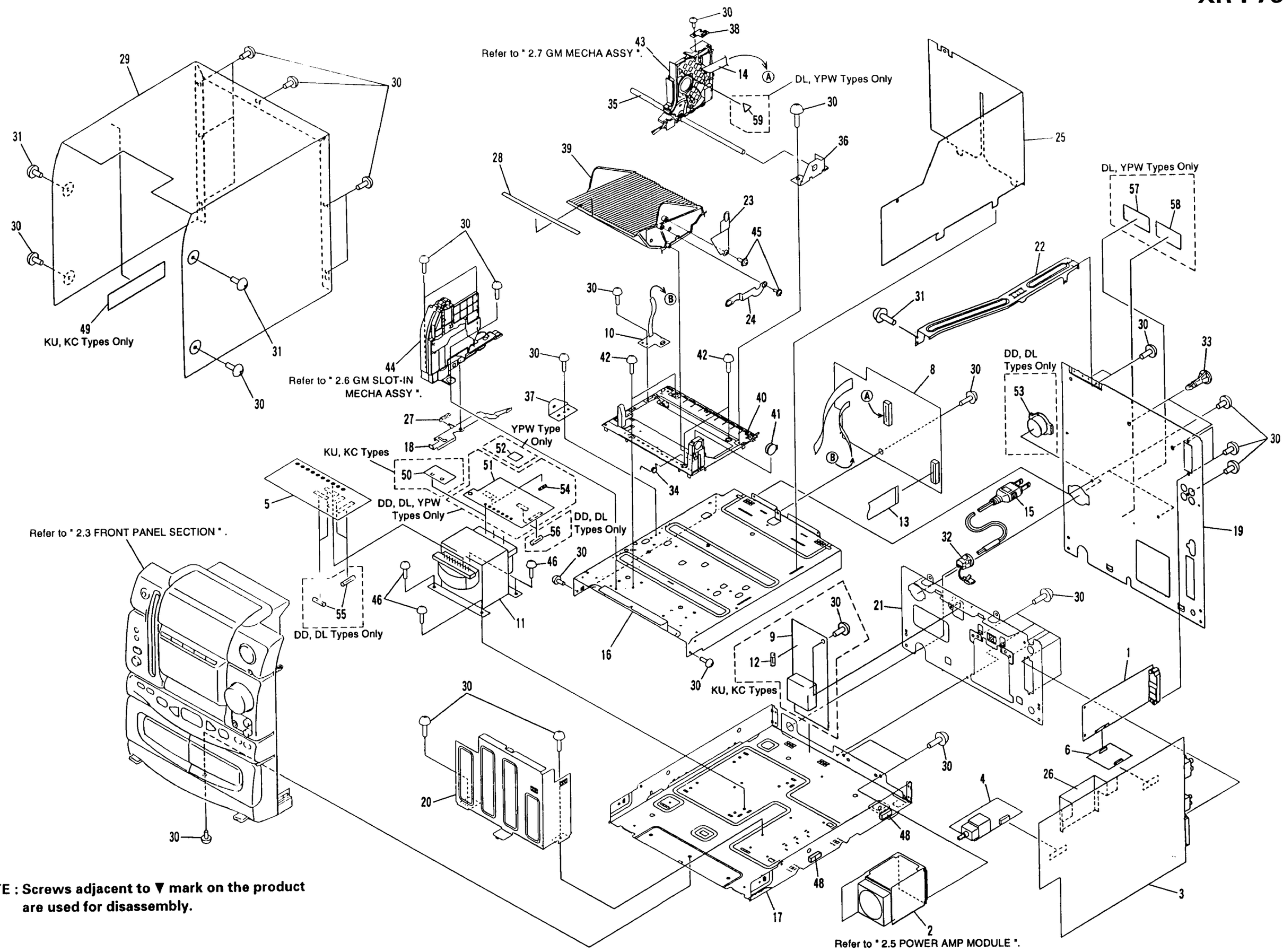
■ Contrast of XR-P760F/KU, KC, DD, DL and YPW

XR-P760F/KU, KC, DD, DL and YPW have the same construction except for the following:

Mark	No.	Description	Part No.					Remarks
			KU type	KC type	DD type	DL type	YPW type	
	3	AF assy	AWZ7886	AWZ7886	AWZ7846	AWZ7846	AWZ7846	
	4	VOL assy	AWZ7858	AWZ7858	AWZ7856	AWZ7856	AWZ7856	
	5	SECONDARY assy	AWZ7864	AWZ7864	AWZ7863	AWZ7863	AWZ7864	
NSP	9	SUB TRANS assy	AWZ7908	AWZ7908	Not used	Not used	Not used	
⚠	11	Power tranformer (T)	ATS7087	ATS7087	ATS7089	ATS7089	ATS7089	
⚠	12	Fuse (6.3A, FU4)	VEK1026	VEK1026	Not used	Not used	Not used	
⚠	15	AC power cord	PDG1015	PDG1015	PDG1013	ADG1131	ADG1123	
	19	Rear panel	ANC7284	ANC7284	ANC7286	ANC7287	ANC7392	
	32	Strain relief	CM-22C	CM-22C	CM-22B	CM-22B	CM-22B	
	49	65 label	ORW1069	ORW1069	Not used	Not used	Not used	
NSP	50	KUC assy	AWZ7909	AWZ7909	Not used	Not used	Not used	
	51	PRIMARY assy	Not used	Not used	AWZ7899	AWZ7899	AWZ7900	
	52	YPW assy	Not used	Not used	Not used	Not used	AWZ7916	
⚠	53	Voltage selector	Not used	Not used	AKX7002	AKX7002	Not used	
⚠	54	Fuse (5A, FU1)	Not used	Not used	REK-107	REK-107	REK-107	
⚠	55	Fuse (T2A, FU5-FU8)	Not used	Not used	AEK1057	AEK1057	Not used	
⚠	56	Fuse (2.5A, FU2, FU3)	Not used	Not used	REK-104	REK-104	Not used	
	57	Caution label	Not used	Not used	Not used	PRW1018	PRW1018	
NSP	58	Caution label (F)	Not used	Not used	Not used	VRW-328	VRW-328	
	59	Caution label (G)	Not used	Not used	Not used	VRW-329	VRW-329	

■ Parts List for XR-P760F/KU

Mark	No.	Description	Parts No.
	1	FM/AM TUNER MODULE	AXQ1012
	2	POWER AMP MODULE	AXQ7017
	3	AF ASSY	AWZ7886
	4	VOL ASSY	AWZ7858
	5	SECONDARY ASSY	AWZ7864
NSP	6	TX CONNECT ASSY	AWZ8176
	7	.....	
	8	CD ASSY	AWZ7889
NSP	9	SUB TRANS ASSY	AWZ7908
NSP	10	HOME SW ASSY	AWZ7917
⚠	11	POWER TRANSFORMER (T)	ATS7087
⚠	12	FUSE (6.3A, FU4)	VEK1026
	13	19P F.F.C /30V	ADD7009
	14	22P F.F.C /30V	ADD7016
⚠	15	AC POWER CORD	PDG1015
	16	SUB CHASSIS	ANA7029
NSP	17	CHASSIS	ANA7030
	18	EJECT LEVER S	ANB7029
	19	REAR PANEL	ANC7284
	20	FRONT STAY	AND7006
	21	REAR STAY	AND7007
	22	HOME LOCK STAY	AND7008
	23	LINK BRACKET A	ANG7065
	24	LINK BRACKET B	ANG7066
	25	COVER	AAK7246
	26	PCB COVER	AAK7247
	27	LEVER SPRING S	ABH7067
	28	DISC RACK PLATE	AAK7251
	29	BONNET CASE	ANE7107
	30	SCREW	BBZ30P080FZK
	31	SCREW	VPZ30P100FZK
	32	STRAIN RELIEF	CM-22C
NSP	33	SPACER	VEC1596
	34	RACK SPRING	ABH7057
	35	GUIDE SHAFT S	ALA7008
	36	SHAFT HOLDER	ANB7021
	37	SHAFT HOLDER S	ANB7024
	38	ANGLE	ANB7043
	39	DISC RACK	ANW7069
	40	RACK BASE S	ANW7070
	41	DAMPER ASSY	AXA7018
	42	SCREW	PBA1085
NSP	43	GM MECHA ASSY	AXA7026
NSP	44	GM SLOT-IN MECHA ASSY	AXA7027
	45	SCREW	IBZ30P080FMC
	46	SCREW	BBZ40P080FZK
	47	.....	
	48	SIDE ROLLER RUBBER	DEB1043
	49	65 LABEL	ORW1069
NSP	50	KUC ASSY	AWZ7909


Refer to " 2.7 GM MECHA ASSY ".
DL, YPW Types Only
KU, KC Types Only
Refer to " 2.6 GM SLOT-IN MECHA ASSY ".
YPW Type Only
KU, KC Types
DD, DL, YPW Types Only
DD, DL Types Only
DD, DL Types Only
DD, DL Types Only
DD, DL Types Only
KU, KC Types
Refer to " 2.3 FRONT PANEL SECTION " .
Refer to " 2.5 POWER AMP MODULE ".

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

2.3 FRONT PANEL SECTION

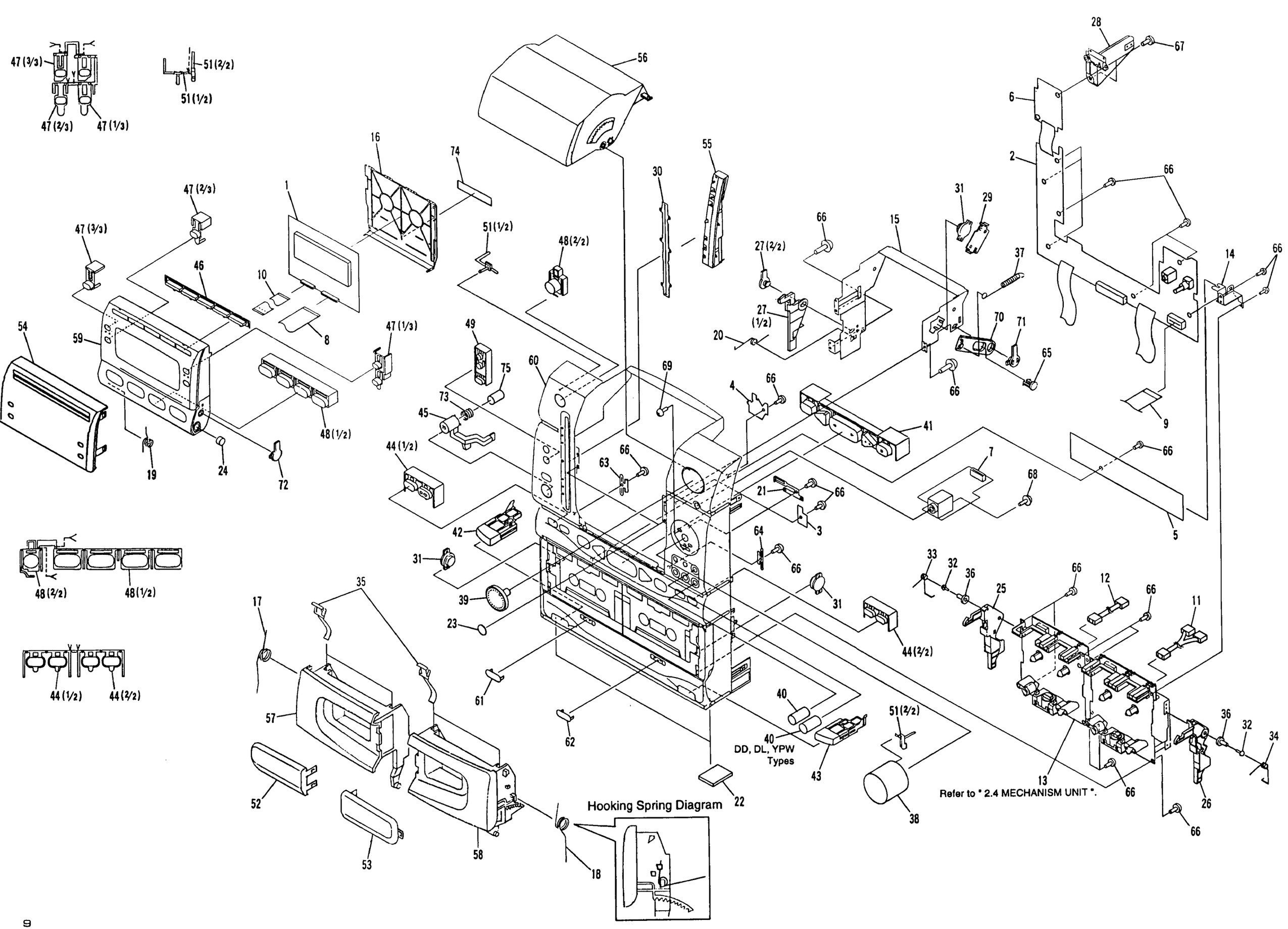
■ Contrast of XR-P760F/KU, KC, DD, DL and YPW

XR-P760F/KU, KC, DD, DL and YPW have the same construction except for the following:

Mark	No.	Description	Part No.					Remarks
			KU type	KC type	DD type	DL type	YPW type	
	1	DISPLAY assy	AWZ7869	AWZ7869	AWZ7871	AWZ7871	AWZ7871	
	2	OPERATION-A assy	AWZ7879	AWZ7879	AWZ7881	AWZ7881	AWZ7881	
	60	Front panel	AMB7289	AMB7289	AMB7291	AMB7291	AMB7291	

■ Parts List for XR-P760F/KU

Mark	No.	Description	Parts No.
	1	DISPLAY ASSY	AWZ7869
	2	OPERATION-A ASSY	AWZ7879
NSP	3	DOOR SW ASSY	AWZ7887
	4	JOG ASSY	AWZ7888
	5	DECK RELAY ASSY	AWZ7902
	6	OPERATION-B ASSY	AWZ7911
NSP	7	HEADPHONE ASSY	AWZ7913
	8	31P F.F.C /60V	ADD7006
	9	17P F.F.C /30V	ADD7007
	10	27P F.F.C /30V	ADD7008
	11	CONNECTOR ASSY 5P	RKP1582
	12	CONNECTOR ASSY 3P	RKP1583
	13	MECHANISM UNIT	RYM1248
	14	EARTH BRACKET	ANG7067
	15	SUB PANEL	ANG7069
	16	REAR PLATE	AAK7203
	17	DOOR SPRING L	ABH7080
	18	DOOR SPRING R	ABH7081
	19	CD DOOR SPRING	ABH7082
	20	EJ ARM SPRING	ABH7083
	21	DOOR SWITCH SPRING	ABK7004
	22	RUBBER PLATE	AEB1111
	23	CUSHION RUBBER	AEB7037
	24	DOOR SPACER	AEB7039
	25	EJECT ARM L	AMR7020
	26	EJECT ARM R	AMR7021
	27	LOCK LEVER	AMR7065
	28	PCB MOLD	AMR7067
	29	MOLD	AMR7088
	30	SLOT-IN MECHA COVER	AWL7020
	31	DAMPER ASSY	AXA7021
	32	SCREW	BSZ20P120FMC
	33	EJECT SPRING (L)	RBH1411
	34	EJECT SPRING (R)	RBH1412
	35	SPRING	RBK1004
	36	COLLAR	RNK2135
	37	SPRING	ABH7088
	38	VOLUME KNOB	AAB7039
	39	JOG KNOB	AAB7067
	40	MIC KNOB	AAB7068
	41	BUTTON ASSY A	AAD7220
	42	EJECT BUTTON S (L)	AAD7221
	43	EJECT BUTTON S (R)	AAD7222
	44	BUTTON ASSY B	AAD7225
	45	OPEN BUTTON S	AAD7226
	46	GENRE BUTTON	AAD7227
	47	TIMER BUTTON	AAD7228
	48	FUNCTION BUTTON S	AAD7234
	49	P. BASS BUTTON	AAD7230
	50	.....	
	51	STA. LENS	AAK7099
	52	DECK WINDOW L	AAK7197
	53	DECK WINDOW R	AAK7198
	54	AMP WINDOW	AAK7215
	55	STAR LIGHT LENS	AAK7200
	56	FOOD	AAN7089
	57	CASSETTE DOOR L	AAN7097
	58	CASSETTE DOOR R	AAN7098
	59	DOOR PANEL	AAN7099
	60	FRONT PANEL	AMB7289
	61	MOLD L	AMR7077
	62	MOLD R	AMR7078
	63	SHAFT HOLDER L	AMR7079
	64	SHAFT HOLDER R	AMR7080
	65	LOCK MOLD	AMR7091
	66	SCREW	BPZ30P080FMC
	67	SCREW	VPZ30P100FZK
	68	SCREW	ABA1005
	69	SCREW	BBZ30P080FZK
	70	LINK MOLD	AMR7089
	71	SHAFT MOLD	AMR7090
	72	DOOR COVER	AMR7076
	73	OPEN BUTTON SPRING	ABH7109
	74	CAUTION LABEL	ARW7009
	75	SPRING SPACER	AEB7048


47 (3/3)
47 (2/3)
47 (1/3)
51 (2/2)
51 (1/2)
48 (2/2)
48 (1/2)
44 (1/2)
44 (2/2)
Hooking Spring Diagram
DD, DL, YPW Types
Refer to " 2.4 MECHANISM UNIT ".

2.4 MECHANISM UNIT

■ Mechanism unit I and II (1/2)

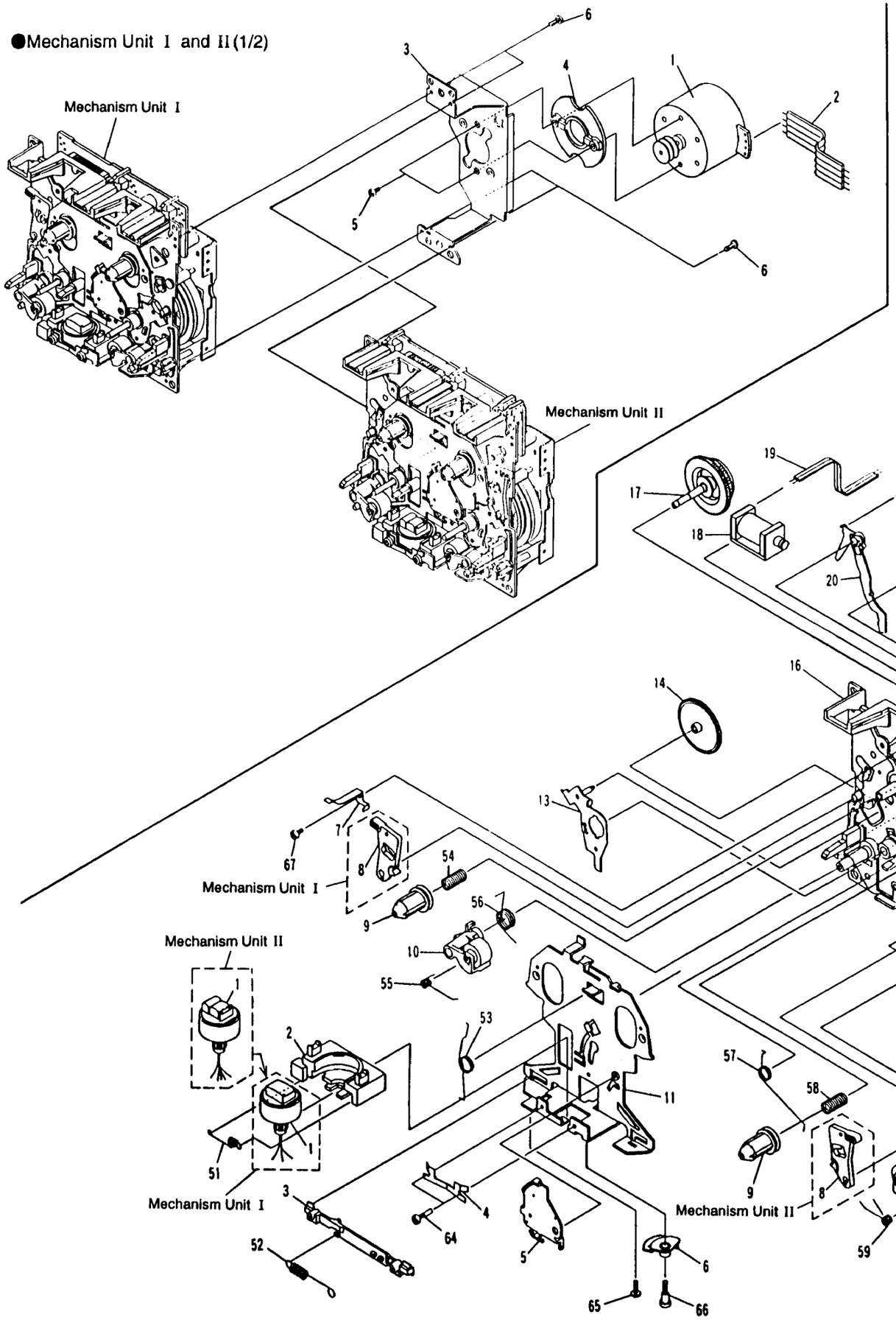
Mark	No.	Description	Parts No.
	1	ASSY MOTOR	RXM1080
NSP	2	JUMPER WIRE	RDD1012
	3	BRACKET MOTOR	RNE1830
	4	SPACER	RNK1822
	5	SCREW	RBA1100
	6	SCREW	PCZ20P040FMC

■ Mechanism unit I and II (2/2)

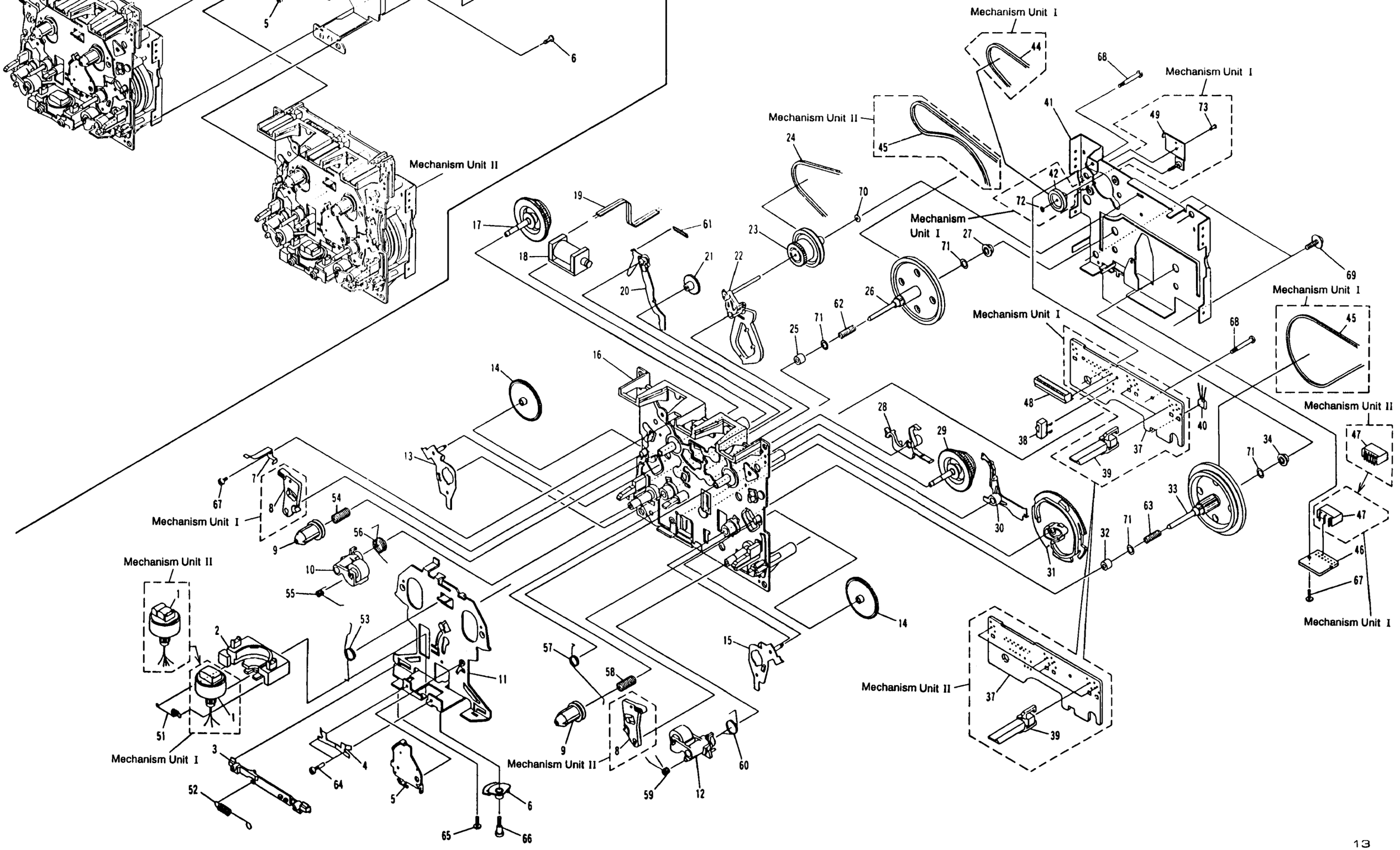
Mark	No.	Description	Parts No.
	1	ASSY HOLDER HEAD (*1)	RXA1400
	1	ASSY HOLDER HEAD (*2)	RXA1664
	2	FRAME HEAD	RNK1715
	3	LEVER HEAD	RNK1716
	4	SPRING AZIMUTH	RBK1006
	5	ASSY ARM ASSIST	RXA1401
	6	GEAR ARM HEAD	RNK1717
	7	SPRING CASSETTE	RBK1039
	8	EJECT LOCK	RNK1718
	9	CAP REEL	RNK1719
	10	ASSY PINCH ARM L	RXA1403
	11	CHASSIS HEAD	RNE1437
	12	ASSY PINCH ARM R	RXA1404
	13	ARM PLAY L	RNK1866
	14	GEAR PLAY	RNK1867
	15	ARM PLAY R	RNK1868
	16	CHASSIS OS	RXA1411
	17	ASSY SUB REEL L	RXA1407
	18	SOLENOID	RXP1020
	19	WIRE	RDC1006
	20	ARM RVS	RNK1721
	21	GEAR FF	RNK1723
	22	ASSY ARM FR	RXA1412
	23	ASSY PULLEY FR	RXA1413
	24	BELT FR	REB1292
	25	METAL	RNG1048
	26	ASSY FLYWHEEL L	RXA1690
	27	METAL	RNG1005
	28	ARM BRAKE	RNK1724
	29	ASSY SUB REEL R	RXA1408
	30	ARM TRIGER	RNK1722
	31	GEAR CAM	RNK1725
	32	METAL	RNG1049
	33	ASSY FLYWHEEL R	RXA1691
	34	METAL	RNG1004
	35	.....	
	36	.....	
	37	P. C. BOARD	RNP1610
	38	SWITCH MODE	RSN1020
	39	SWITCH (LEAF)	RSN1019
	40	HALL IC	DN6851A
	41	BRACKET FW (*1)	RNE1854
	41	BRACKET FW (*2)	RNE1438
	42	PULLEY (*1 only)	RNK2132
	43	.....	
	44	BELT FW (*1 only)	REB1291
	45	BELT MAIN (* 1)	REB1290
	45	BELT MAIN (* 2)	REB1289
	46	P. C. BOARD	RNP1348
	47	HOUSING (*1)	RKP1396
	47	HOUSING (*2)	RKP1397
	48	CONNECTOR (*1)	RKP1713
	48	CONNECTOR (*2)	RKP1714
	49	ASSY HOLDER (*1 only)	RXA1689
	50	.....	
	51	SPRING	RBH1282
	52	SPRING	RBH1283
	53	SPRING	RBH1284
	54	SPRING	RBH1286
	55	SPRING	RBH1288
	56	SPRING	RBH1291
	57	SPRING	RBH1285
	58	SPRING	RBH1287
	59	SPRING	RBH1289
	60	SPRING	RBH1290
	61	SPRING	RBH1292
	62	FWP SP (SPRING)	RBH1061
	63	SPRING	RBH1325
	64	SCREW (For AZIMUTH)	RBA1023
	65	SCREW	RBA1027
	66	SCREW	RBA1030
	67	SCREW	PCZ20P040FMC
	68	SCREW	RBA1093
	69	SCREW	RBA1094
	70	WASHER	RBF1046
	71	WASHER	WA26D047D013
	72	WASHER (*1 only)	WT13D030D025
	73	SCREW (*1 only)	RBA1118

Note) **1: Mechanism Unit I*
**2: Mechanism Unit II*

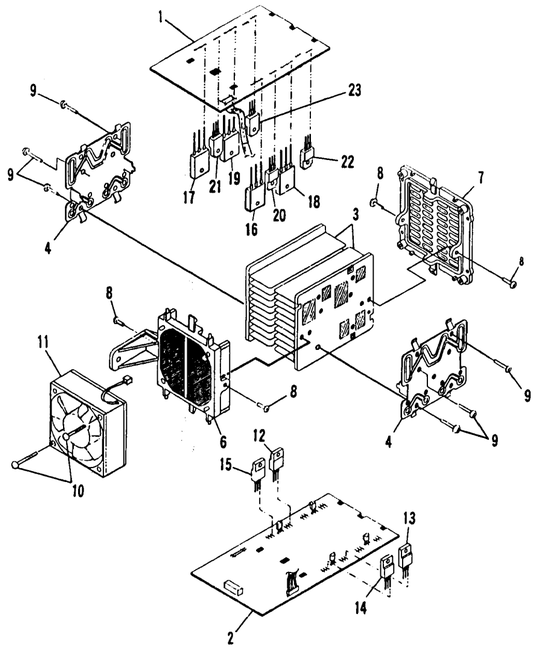
●Mechanism Unit I and II (1/2)



●Mechanism Unit I and II (2/2)



2.5 POWER AMP MODULE

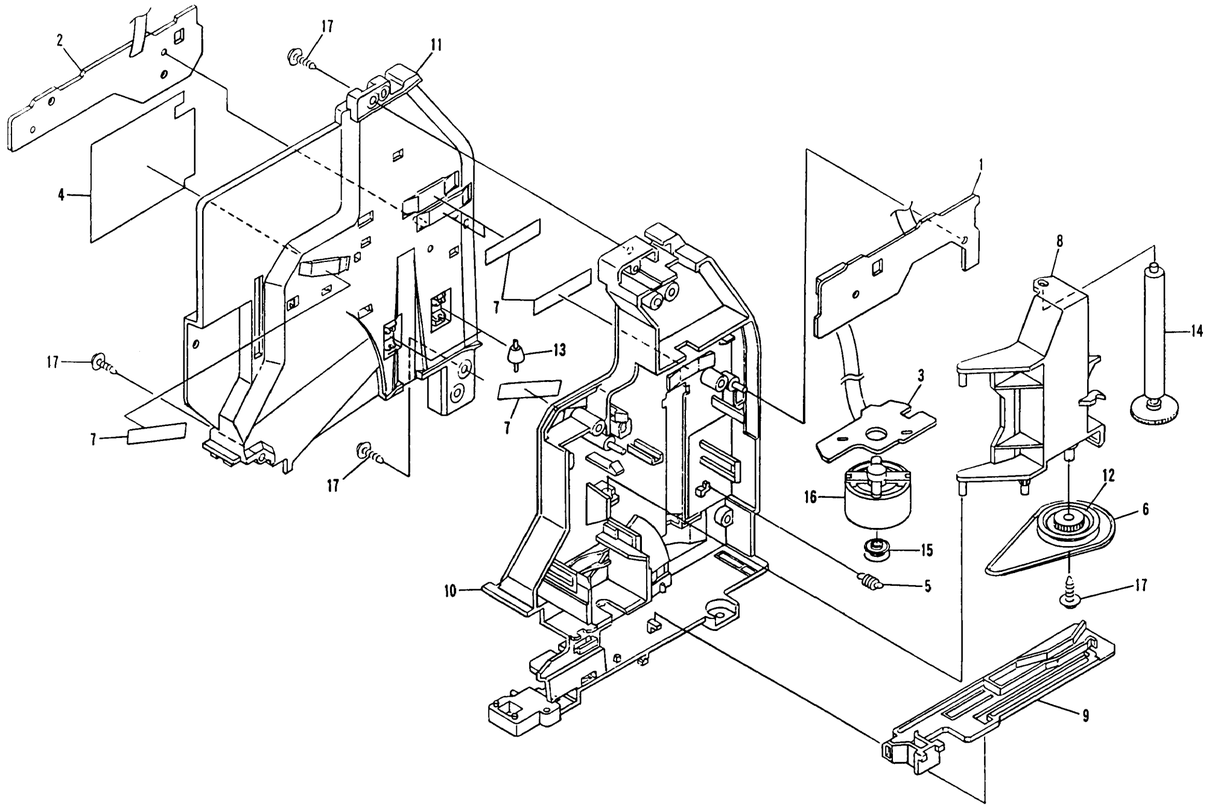


Note: Ensure that silicon grease does not adhere to the MOLD A (No. 6) and MOLD B (No. 7).

Mark	No.	Description	Parts No.
	1	FRONT 100W ASSY	AWZ7518
	2	REGULATOR ASSY	AWZ7520
	3	HEAT SINK (AL)	ANH7007
	4	BRACKET	ANG1868
	5	.....	
	6	MOLD A	AMR2594
	7	MOLD B	AMR2595
	8	SCREW (3×10)	ABA1021
	9	SCREW	BBZ30P140FZK
	10	SCREW	BPZ30P350FZK
	11	FAN MOTOR	AXM7003
	12	REGULATOR IC (IC7401)	NJM7812FAS
	13	REGULATOR IC (IC7402)	NJM7912FA
	14	REGULATOR IC (IC7403)	NJM7812FAS
	15	REGULATOR IC (IC7404)	NJM7805FAS
⚠	16	TRANSISTOR (Q7511)	2SA1264N
⚠	17	TRANSISTOR (Q7512)	2SA1264N
⚠	18	TRANSISTOR (Q7513)	2SC3181N
⚠	19	TRANSISTOR (Q7514)	2SC3181N
⚠	20	TRANSISTOR (Q7503)	2SC4793
	21	TRANSISTOR (Q7504)	2SC4793
	22	TRANSISTOR (Q7509)	2SA1837
	23	TRANSISTOR (Q7510)	2SA1837

2.6 GM SLOT-IN MECHA ASSY

Mark	No.	Description	Parts No.
NSP	1	SENSOR BOARD ASSY	AWZ7839
NSP	2	LED BOARD ASSY	AWZ7840
NSP	3	MOTOR BOARD ASSY	AWZ7841
	4	BLIND	AAK7219
	5	ROLLER SPRING	ABH7063
	6	BELT	AEB7033
	7	ECSAINE	AED7004
	8	GEAR HOLDER	ANW7047
	9	SLIDE PLATE	ANW7048
	10	CASE (M)	ANW7049
	11	CASE (S)	ANW7077
	12	GEAR PULLEY A	ANW7066
	13	GUIDE ROLLER	ANW7076
	14	ROLLER ASSY	AXA7029
	15	MOTOR PULLEY	PNW1634
	16	DC MOTOR /0.75W	PXM1010
	17	SCREW	IPZ20P080FMC

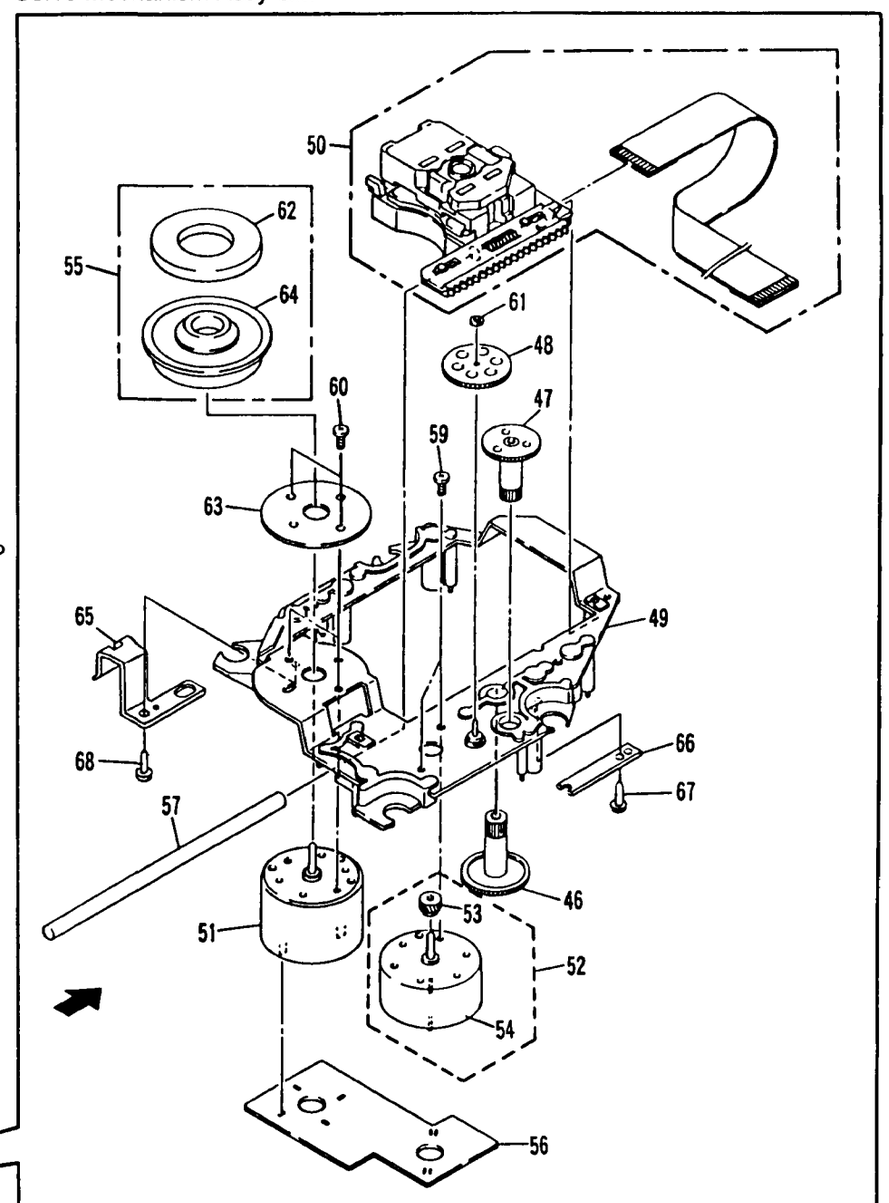


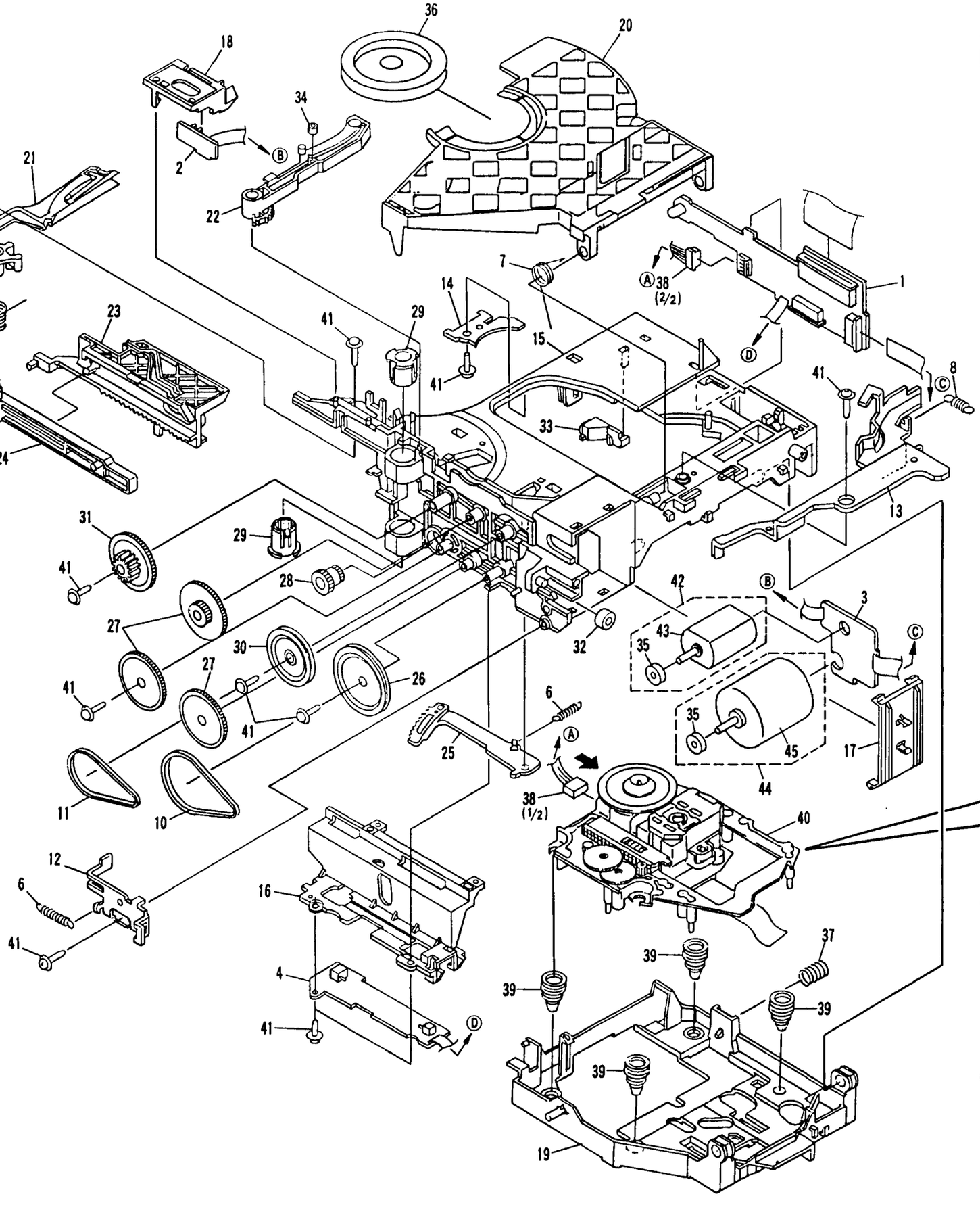
2.7 GM MECHA ASSY

Mark	No.	Description	Parts No.
NSP	1	MECHA PCB ASSY	AWZ7835
NSP	2	SENSOR PCB ASSY	AWZ7836
NSP	3	MOTOR PCB ASSY	AWZ7837
NSP	4	SW PCB ASSY	AWZ7838
	5	ARM A SPRING	ABH7050
	6	GEAR PLATE SPRING	ABH7051
	7	CLAMP SPRING	ABH7107
	8	LOCK LEVER SPRING	ABH7106
	9	.....	
	10	LOADING BELT	AEB7029
	11	BELT	AEB7030
NSP	12	LOCK ANGLE	ANB7027
NSP	13	LOCK LEVER	ANB7038
NSP	14	SERVO STOPPERS	ANB7047
	15	LOADING BASE	ANW7051
	16	CAM COVER	ANW7052
	17	MOTOR HOLDER	ANW7053
	18	SENSOR HOLDER	ANW7054
	19	FLOAT BASE	ANW7055
	20	CLAMPER HOLDER	ANW7056
	21	ARM (A)	ANW7057
	22	ARM (B)	ANW7058
	23	DRIVE PLATE	ANW7059
	24	ARM PLATE	ANW7060
	25	GEAR PLATE	ANW7061
	26	GEAR PULLEY (B)	ANW7062
	27	GEAR A	ANW7063
	28	DRIVE GEAR	ANW7064
	29	BEARING	ANW7065
	30	GEAR PULLEY A	ANW7066
	31	SELECT GEAR	ANW7067
	32	ROLLER	ANW7068
	33	LED LENS	ANW7072
	34	ROLLER B	ANW7075
	35	MOTOR PULLEY	PNW1634
	36	CLAMPER	PNW2569
	37	FLOAT SPRING	ABH7049
	38	CONNECTOR ASSY (4P)	ADE7006
	39	FLOAT RUBBER	AEB7028
NSP	40	SERVO MECHANISM ASSY GM	AXA7028
	41	SCREW	IPZ20P080FMC
	42	MOTOR ASSY	AEA7005
NSP	43	MOTOR	PXM1002
	44	MOTOR ASSY	AEA7006
	45	LOADING MOTOR	VXM1034
	46	GEAR 1	PNW2052
	47	GEAR 2	PNW2053
	48	GEAR 3	PNW2054
	49	CARRIAGE BASE	PNW2445
	50	PICKUP ASSY	AEA7004

Mark	No.	Description	Parts No.
	51	D.C. MOTOR ASSY	PEA1235
	52	CARRIAGE DC MOTOR ASSY	PEA1246
	53	PINION GEAR	PNW2055
NSP	54	CARRIAGE DC MOTOR/0.3W	PXM1027
	55	DISC TABLE ASSY	PEA1314
	56	MECHANISM BOARD ASSY	PWX1192
	57	GUIDE BAR	PLA1094
	58	.....	
	59	SCREW	JFZ17P025FZK
	60	SCREW	JFZ20P040FMC
	61	WASHER	WT12D032D025
	62	CLAMP MAGNET	PMF1014
	63	YOKE M	PNB1312
NSP	64	DISC TABLE	PNW2410
NSP	65	FLOAT ANGLE	ANB7020
	66	GEAR STOPPER	PNB1303
	67	SCREW	BPZ20P060FMC
	68	SCREW	BPZ26P100FMC
	69	.....	
	70	FROIL	GYA1001
	71	HA NARL	GEM1016

Servo Mechanism Assy GM



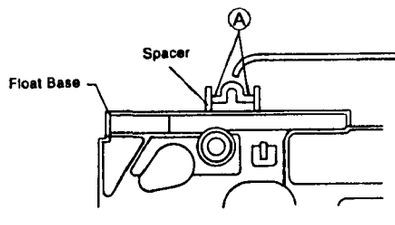


● How to install the disc table

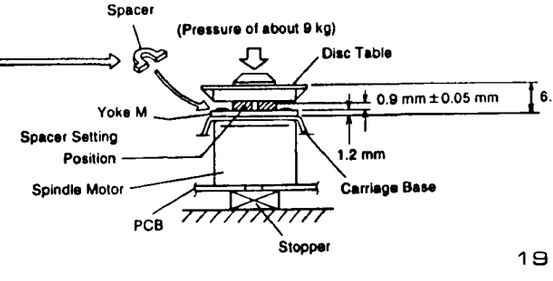
1 Use nipper or other tool to cut the two sections marked Ⓐ figure 1. Then remove the spacer.

2 While supporting the spindle motor shaft with the stopper, put spacer on top of the yoke M, and stick the disc table on top (takes about 9kg pressure). Take off the spacer.

1



2



3. SCHEMATIC AND PCB CONNECTION DIAGRAMS

3.1 OVERALL SCHEMATIC DIAGRAM

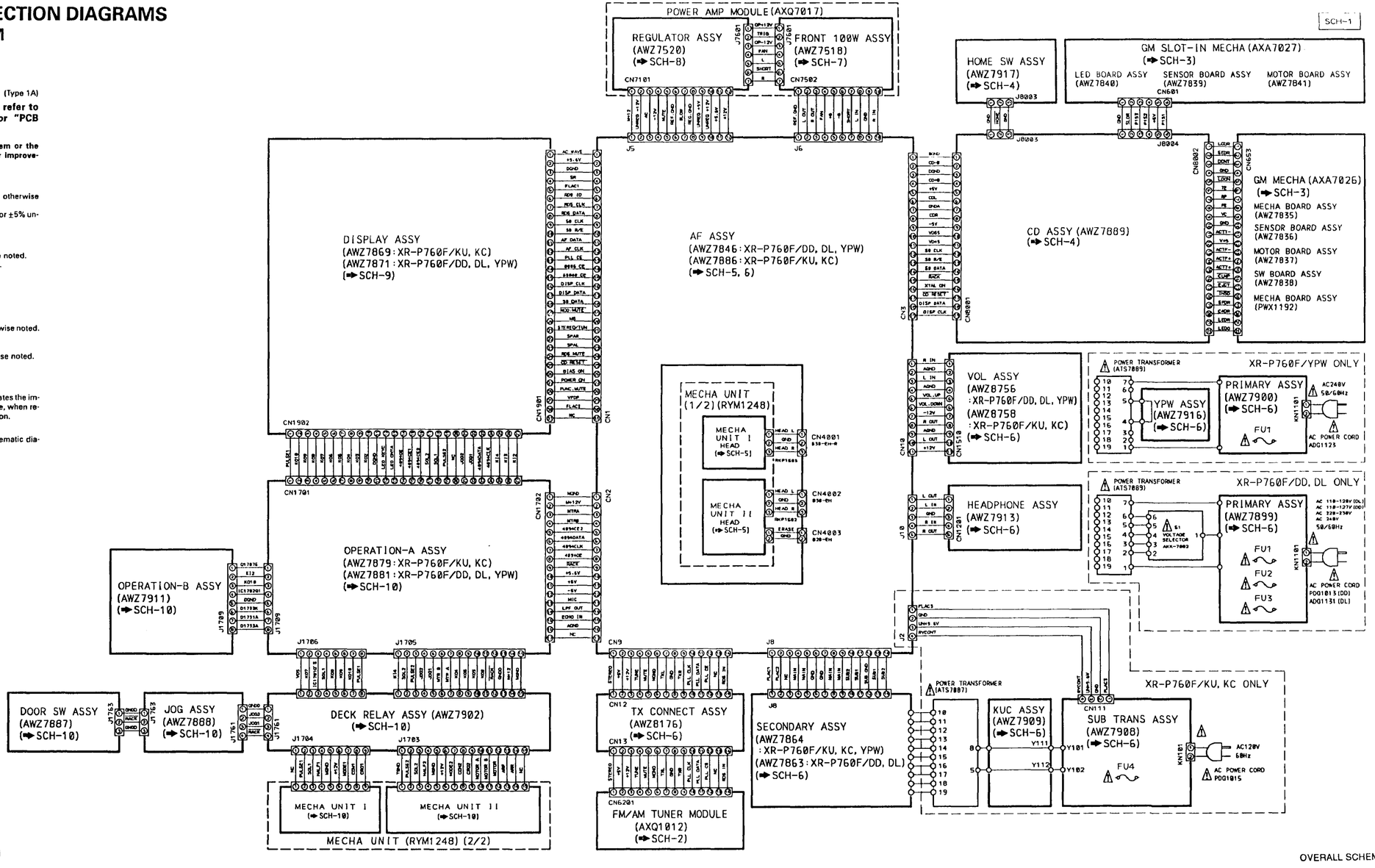
NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   (V) : Signal voltage at rated output.
   or ~ V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇨ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - ⟋ : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH—□ ON THE SCHEMATIC DIAGRAM:**
   - SCH—□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

DISPLAY ASSY
S1901 : STATION MEMORY
S1902 : TITLE INPUT
S1903 : 21–25
S1904 : 16–20
S1905 : 11–15
S1906 : 6–10
S1907 : 1–5
S1908 : TIMER REC/WAKE-UP
S1909 : DISPLAY/CLOCK ADJ
S1910 : TAPE I / II
S1911 : CD
S1912 : MD/CD II
S1913 : FM/AM

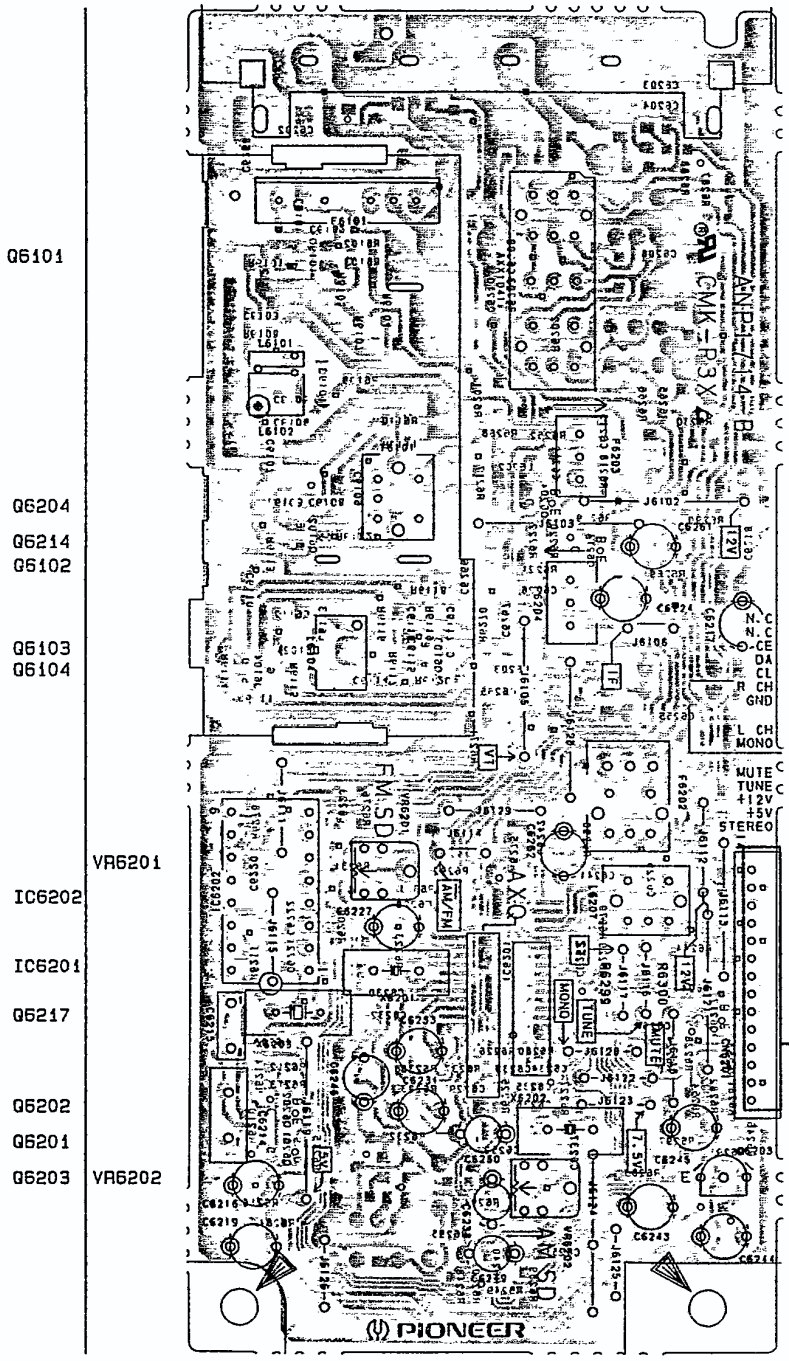
OPERATION-A ASSY
S1703 : STOP
S1704 : ▶▶+
S1705 : −◀◀
S1706 : BEST
S1708 : SLOT ⏏ EJECT
S1710 : DOLBY NR ON/OFF
S1711 : FREQ/STATION
S1712 : ◀ START ▶
S1714 : REC STOP
S1715 : ASES/COPY
S1716 : SFC/KARAOKE
S1717 : P.BASS (DEMO)

OPERATION-B ASSY
S1789 : POWER STANDBY/ON


SCH-1
POWER AMP MODULE (AXQ7017)
REGULATOR ASSY (AWZ7520) (➡SCH-8)
FRONT 100W ASSY (AWZ7518) (➡SCH-7)
HOME SW ASSY (AWZ7917) (➡SCH-4)
GM SLOT-IN MECHA (AXA7027) (➡SCH-3)
LED BOARD ASSY (AWZ7840)
SENSOR BOARD ASSY (AWZ7839)
MOTOR BOARD ASSY (AWZ7841)
GM MECHA (AXA7026) (➡SCH-3)
MECHA BOARD ASSY (AWZ7835)
SENSOR BOARD ASSY (AWZ7836)
MOTOR BOARD ASSY (AWZ7837)
SW BOARD ASSY (AWZ7838)
MECHA BOARD ASSY (PWX1192)
DISPLAY ASSY (AWZ7869 : XR-P760F/KU, KC) (AWZ7871 : XR-P760F/DD, DL, YPW) (➡SCH-9)
AF ASSY (AWZ7846 : XR-P760F/DD, DL, YPW) (AWZ7886 : XR-P760F/KU, KC) (➡SCH-5, 6)
CD ASSY (AWZ7889) (➡SCH-4)
MECHA UNIT (1/2) (RYM1248)
MECHA UNIT I HEAD (➡SCH-5)
MECHA UNIT II HEAD (➡SCH-5)
VOL ASSY (AWZ8756 : XR-P760F/DD, DL, YPW) (AWZ8758 : XR-P760F/KU, KC) (➡SCH-6)
POWER TRANSFORMER (ATS7889)
XR-P760F/YPW ONLY
YPW ASSY (AWZ7916) (➡SCH-6)
PRIMARY ASSY (AWZ7900) (➡SCH-6)
AC 240V 50/60Hz
AC POWER CORD ADG1123
HEADPHONE ASSY (AWZ7913) (➡SCH-6)
XR-P760F/DD, DL ONLY
PRIMARY ASSY (AWZ7899) (➡SCH-6)
S1 VOLTAGE SELECTOR AKH-7002
AC 110–120V (DL)
AC 110–127V (DD)
AC 220–230V
AC 240V
50/60Hz
FU1
FU2
FU3
AC POWER CORD PDG1013 (DD) ADG1131 (DL)
OPERATION-A ASSY (AWZ7879 : XR-P760F/KU, KC) (AWZ7881 : XR-P760F/DD, DL, YPW) (➡SCH-10)
OPERATION-B ASSY (AWZ7911) (➡SCH-10)
DOOR SW ASSY (AWZ7887) (➡SCH-10)
JOG ASSY (AWZ7888) (➡SCH-10)
DECK RELAY ASSY (AWZ7902) (➡SCH-10)
MECHA UNIT I (➡SCH-10)
MECHA UNIT II (➡SCH-10)
MECHA UNIT (RYM1248) (2/2)
TX CONNECT ASSY (AWZ8176) (➡SCH-6)
FM/AM TUNER MODULE (AXQ1012) (➡SCH-2)
SECONDARY ASSY (AWZ7864 : XR-P760F/KU, KC, YPW) (AWZ7863 : XR-P760F/DD, DL) (➡SCH-6)
POWER TRANSFORMER (ATS7887)
XR-P760F/KU, KC ONLY
KUC ASSY (AWZ7909) (➡SCH-6)
SUB TRANS ASSY (AWZ7908) (➡SCH-6)
AC120V 60Hz
AC POWER CORD PDG1015
FU4

3.2 FM/AM TUNER MODULE

FM/AM TUNER MODULE



- This diagram is viewed from the mounted parts side.

NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

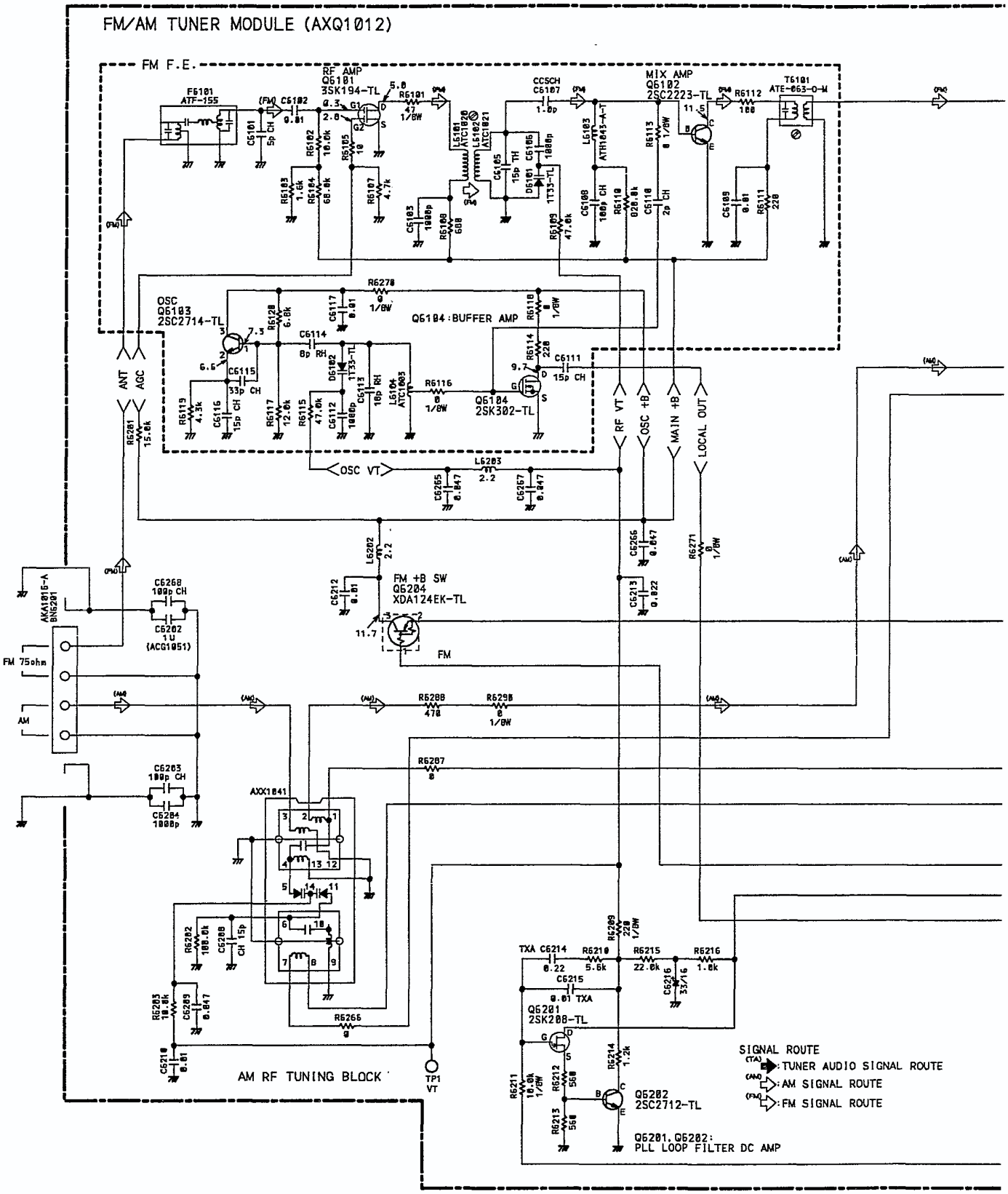
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
Q504 (E, B, C) / Q504	Q504 Q504	Transistor
D203 / D203	D203	Diode
C513 / C513	C513	Capacitor (Polarized)

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊐ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

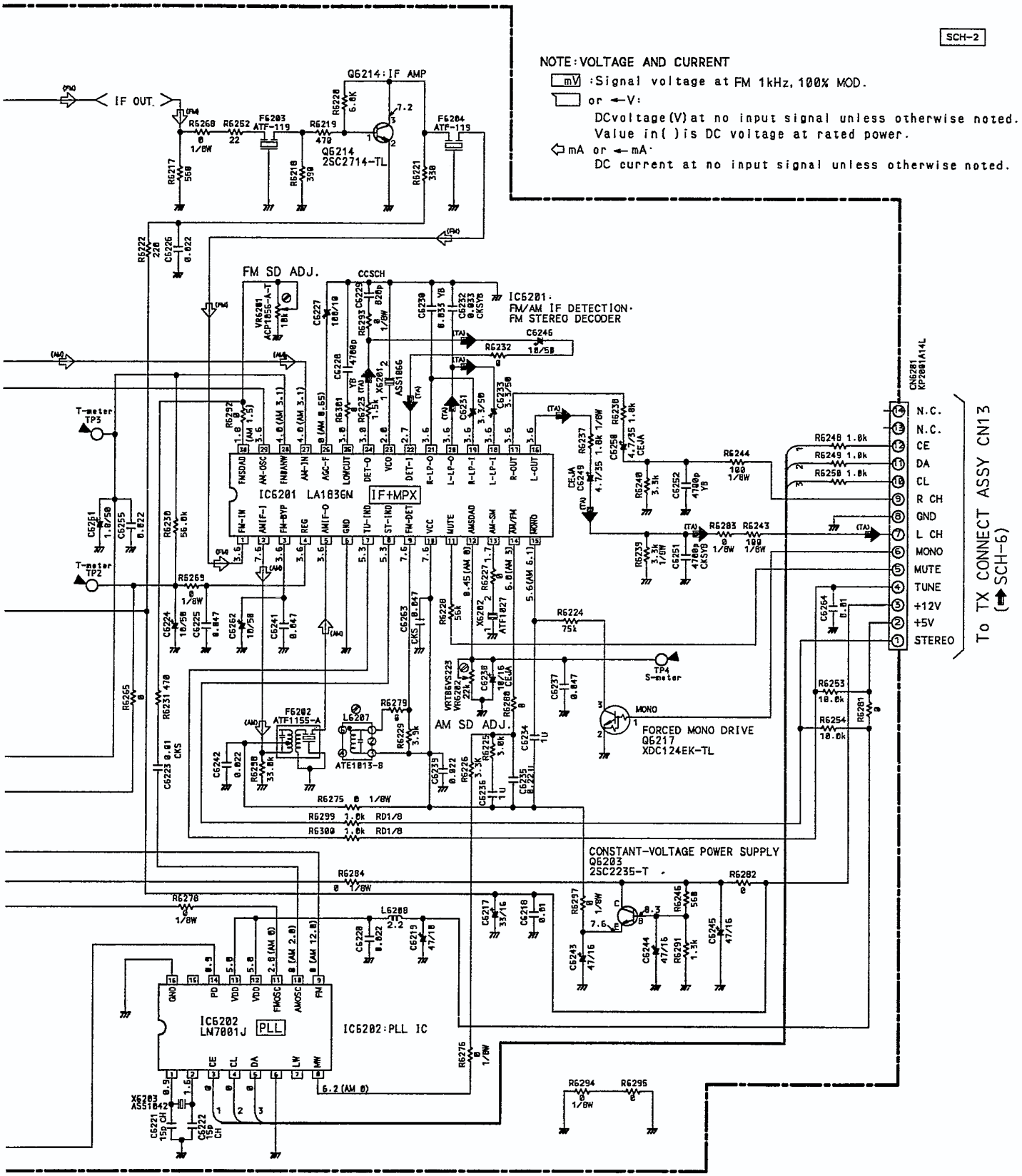
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

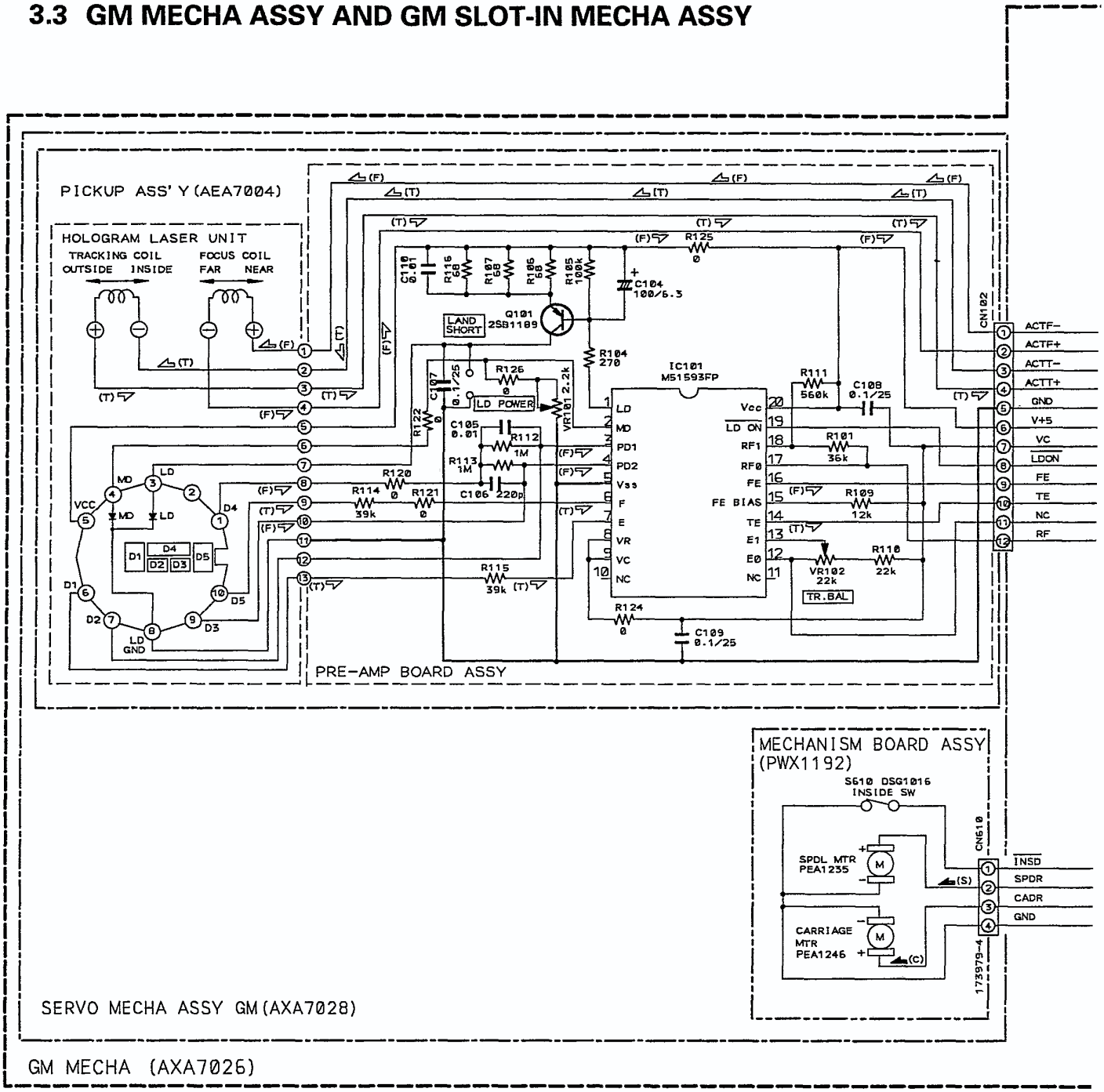
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3- terminal regulator



SCH-2 FM/AM TUNER MODULE


SCH-2
NOTE: VOLTAGE AND CURRENT
mV :Signal voltage at FM 1kHz, 100% MOD.
or ←V:
DC voltage (V) at no input signal unless otherwise noted.
Value in ( ) is DC voltage at rated power.
mA or ←mA:
DC current at no input signal unless otherwise noted.
Q6214: IF AMP
Q6214 2SC2714-TL
IF OUT.
FM SD ADJ.
IC6201.
FM/AM IF DETECTION.
FM STEREO DECODER
IC6201 LA1836N
IF+MPX
T-meter TP3
T-meter TP2
TP4 S-meter
AM SD ADJ.
F6202 ATF1155-A
L6207
ATE1013-B
MONO
FORCED MONO DRIVE
Q6217
XDC124EK-TL
CONSTANT-VOLTAGE POWER SUPPLY
Q6203
2SC2235-T
IC6202
LM7001J
PLL
IC6202:PLL IC
X6203
AS51042
N.C.
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
To TX CONNECT ASSY CN13
(⇑SCH-6)

3.3 GM MECHA ASSY AND GM SLOT-IN MECHA ASSY



SIGNAL ROUTE

(F) : FOCUS SERVO LOOP LINE

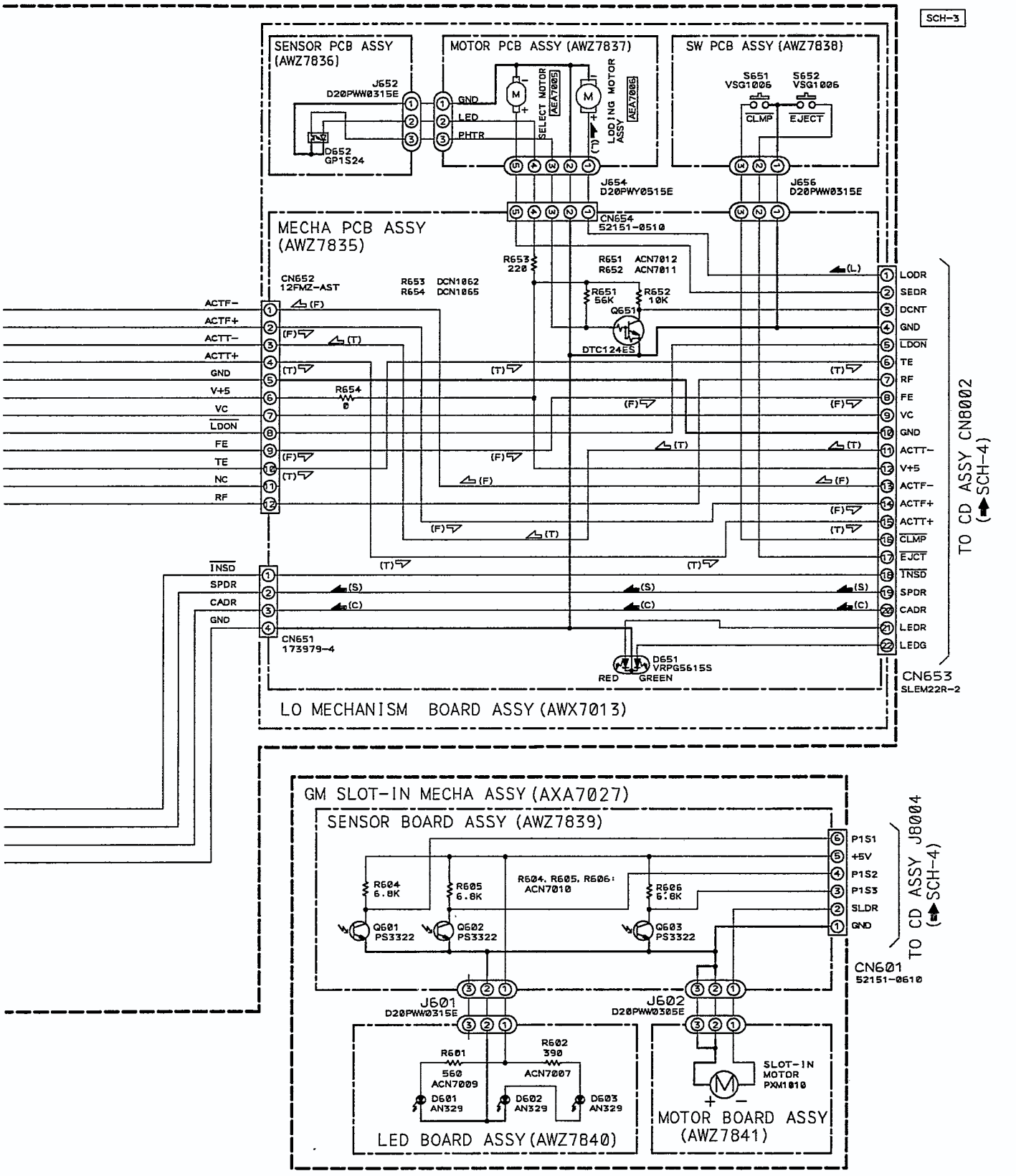
(T) : TRACKING SERVO LOOP LINE

(L) : LOADING MOTOR ROUTE

(S) : SPINDLE MOTOR ROUTE

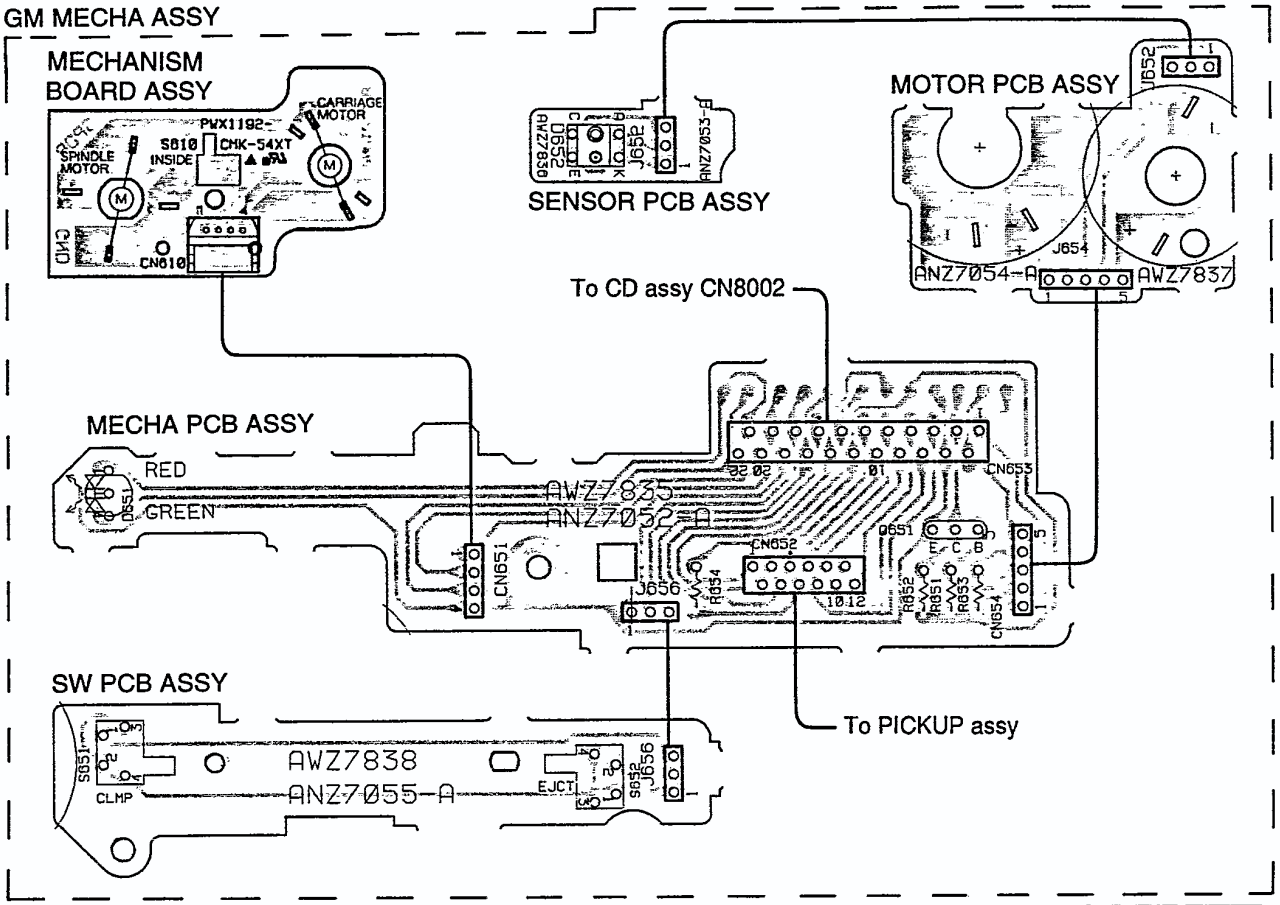
(C) : CARRIAGE MOTOR ROUTE

SCH−3


SCH-3
SENSOR PCB ASSY (AWZ7836)
J652 D20PWW0315E
D652 GP1S24
MOTOR PCB ASSY (AWZ7837)
GND
LED
PHTR
SELECT MOTOR AEA7005
LOADING MOTOR ASSY AEA7006
SW PCB ASSY (AWZ7838)
S651 VSG1006
S652 VSG1006
CLMP
EJECT
J654 D20PWY0515E
J656 D20PWW0315E
CN654 52151-0510
MECHA PCB ASSY (AWZ7835)
CN652 12FMZ-AST
R653 DCN1062
R654 DCN1065
R653 220
R651 ACN7012
R652 ACN7011
R651 56K
R652 10K
Q651 DTC124ES
R654 0
ACTF-
ACTF+
ACTT-
ACTT+
GND
V+5
VC
LDON
FE
TE
NC
RF
LODR
SEDR
DCNT
GND
LDON
TE
RF
FE
VC
GND
ACTT-
V+5
ACTF-
ACTF+
ACTT+
CLMP
EJCT
INSD
SPDR
CADR
LEDR
LEDG
TO CD ASSY CN8002 (SCH-4)
INSD
SPDR
CADR
GND
CN651 173979-4
D651 VRPG5615S
RED
GREEN
CN653 SLEM22R-2
LO MECHANISM BOARD ASSY (AWX7013)
GM SLOT-IN MECHA ASSY (AXA7027)
SENSOR BOARD ASSY (AWZ7839)
R604 6.8K
R605 6.8K
R604, R605, R606: ACN7010
R606 6.8K
Q601 PS3322
Q602 PS3322
Q603 PS3322
P1S1
+5V
P1S2
P1S3
SLDR
GND
TO CD ASSY JB004 (SCH-4)
CN601 52151-0610
J601 D20PWW0315E
J602 D20PWW0305E
R601 560 ACN7009
R602 390 ACN7007
D601 AN329
D602 AN329
D603 AN329
LED BOARD ASSY (AWZ7840)
SLOT-IN MOTOR PXM1010
MOTOR BOARD ASSY (AWZ7841)

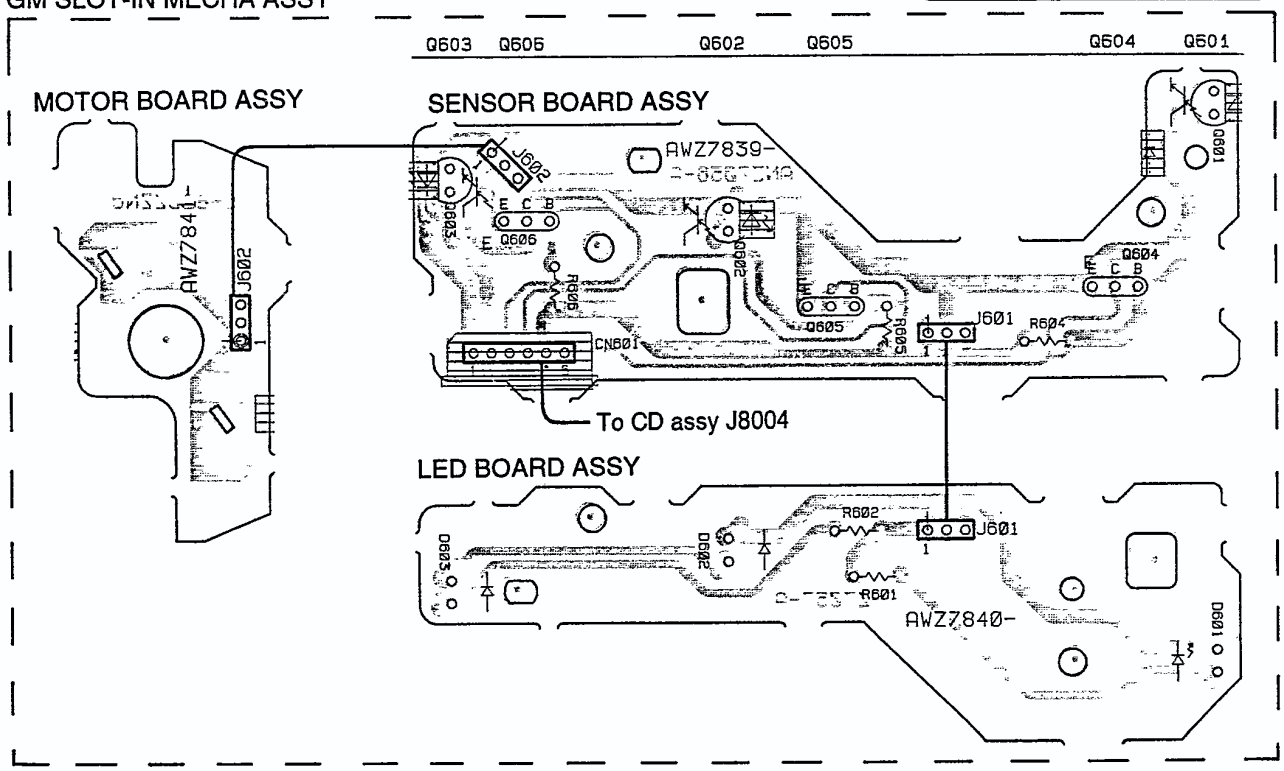
XR-P760F

PCB–2



- This diagram is viewed from the mounted parts side.

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

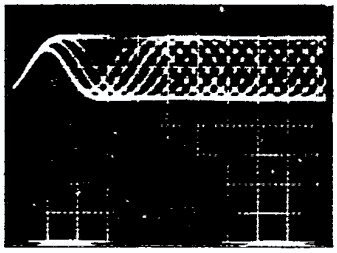


Waveforms

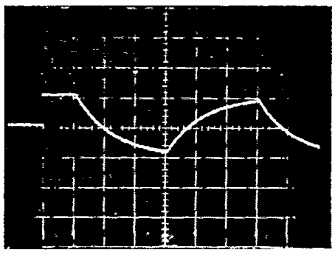
Note: The encircled numbers denote measuring point in the schematic disgram.

*2 FOCUS: Press the key without loading a disc.

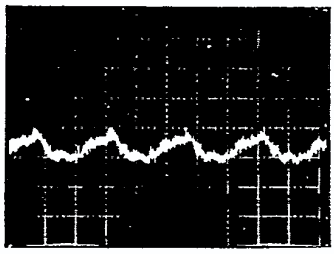
(2) TP1-Pin1: PLAY MODE (RF)
500mV/div 500nsec/div



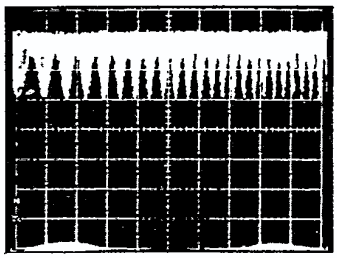
(5) IC8202-Pin3: FOCUS-IN (*2) MODE (FODR)
1V/div 200msec/div



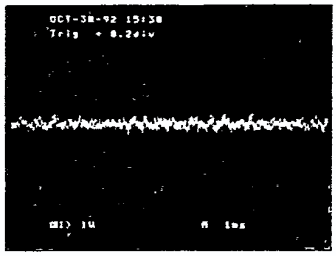
(7) IC8201-Pin3: PLAY MODE (SPDR)
1V/div 50msec/div



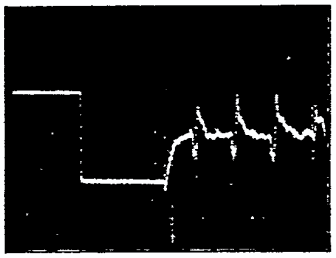
(2) TP1-Pin1: TRACK SEARCH MODE (RF)
500mV/div 200μsec/div



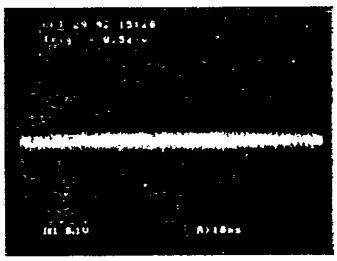
(5) IC8202-Pin3: PLAY MODE (FODR)
1V/div 1msec/div



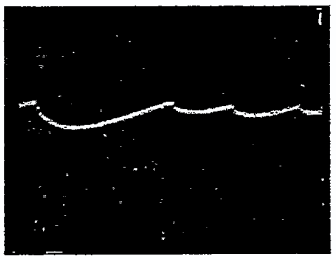
(7) IC8201-Pin3: TRACK SEARCH MODE (SPDR)
2V/div 50msec/div



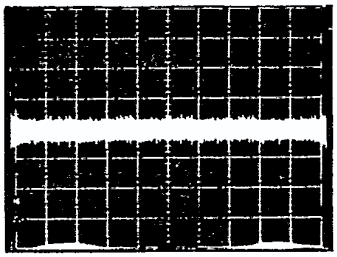
(3) TP1-Pin6: PLAY MODE (FOER)
100mV/div 10msec/div



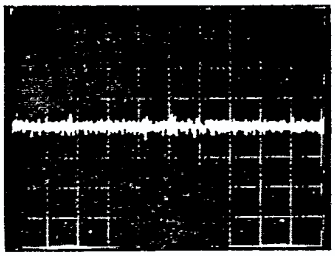
(8) IC8202-Pin9: PLAY MODE (CADR)
0.2V/div 2sec/div



(4) TP1-Pin2: PLAY MODE (TRER)
1V/div 1msec/div

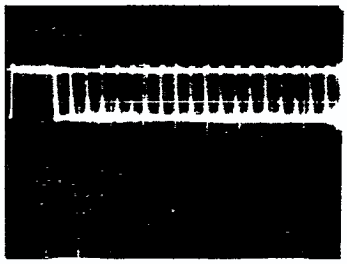


(6) IC8202-Pin4: PLAY MODE (TRDR)
500mV/div 1msec/div

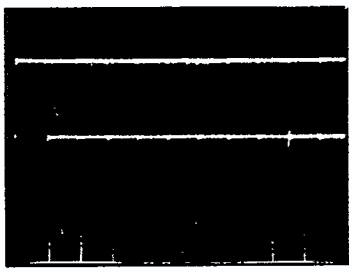


(8) IC8202-Pin9: TRACK SEARCH MODE (CADR)
2V/div 200msec/div

⑨ IC8151-Pin32: PLAY MODE (EFM)
2V/div 500nsec/div

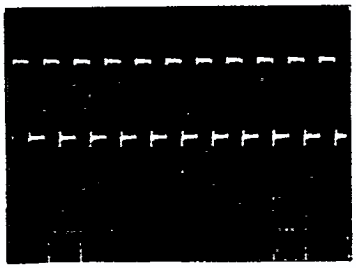


⑲ IC8301-Pin44: PLAY MODE (1kHz) (PCMD)
2V/div 500nsec/div

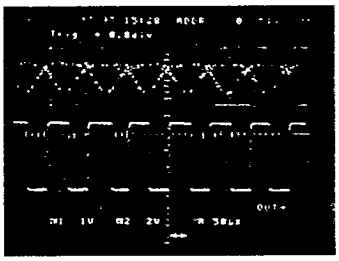


㉝ IC8301-Pin25: PLAY MODE (MDP)
2V/div 2μsec/div

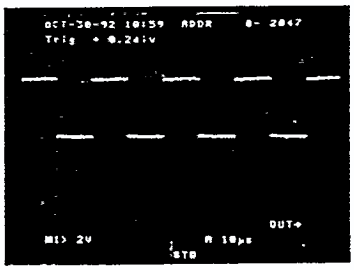
⑯ IC8301-Pin46: PLAY MODE (1kHz) (BCK)
2V/div 500nsec/div



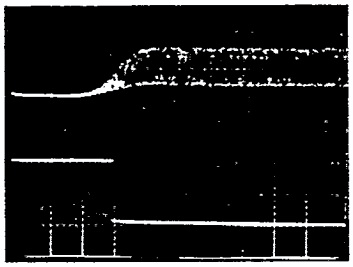
㉓ : TRACK SEARCH MODE
Upper: TP1-Pin1 (RF) 1V/div
Lower: IC8151-Pin26 (C. OUT)
2V/div 50μsec/div

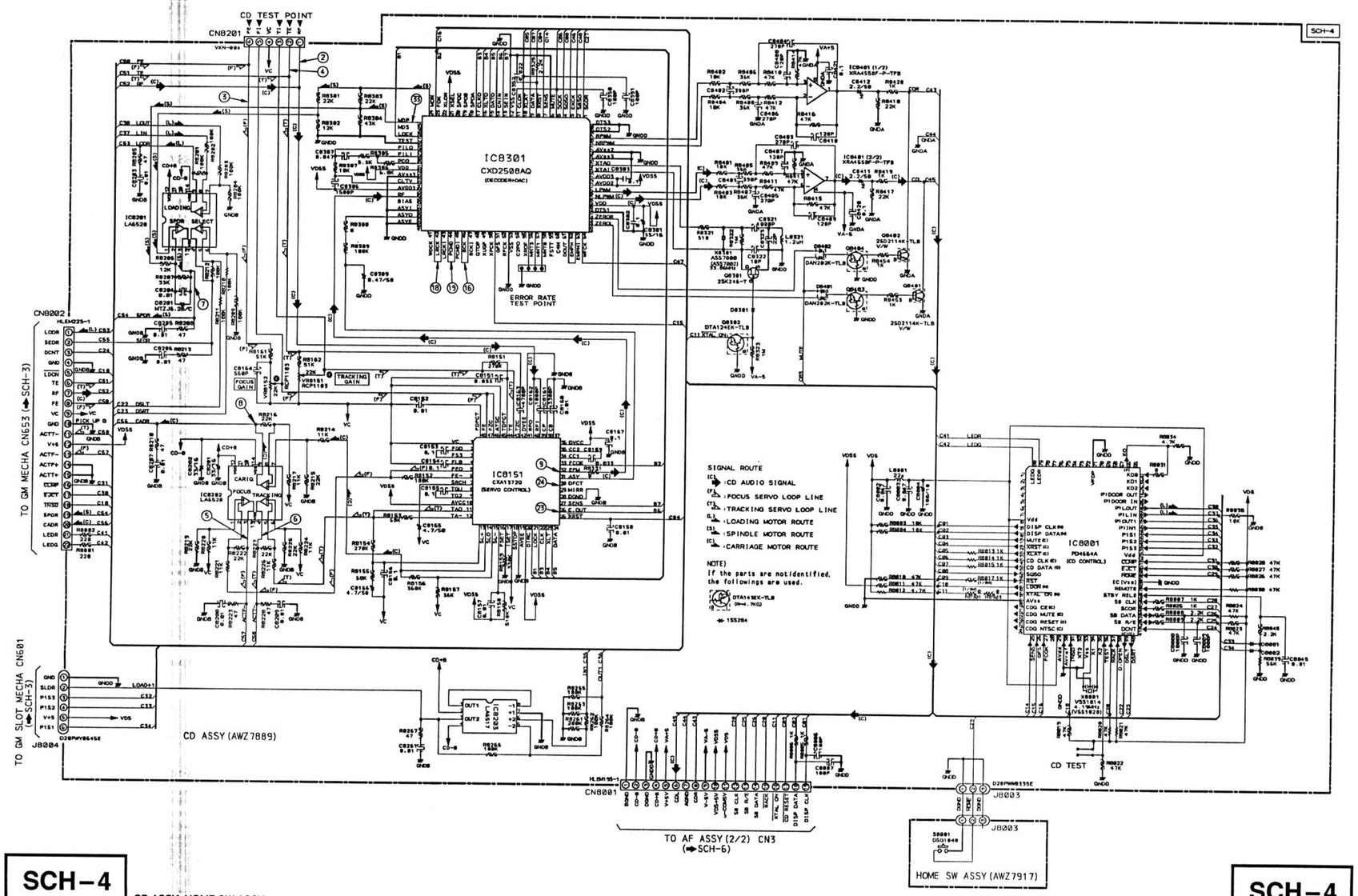


⑱ IC8301-Pin42: PLAY MODE (1kHz) (LRCK)
2V/div 10μsec/div



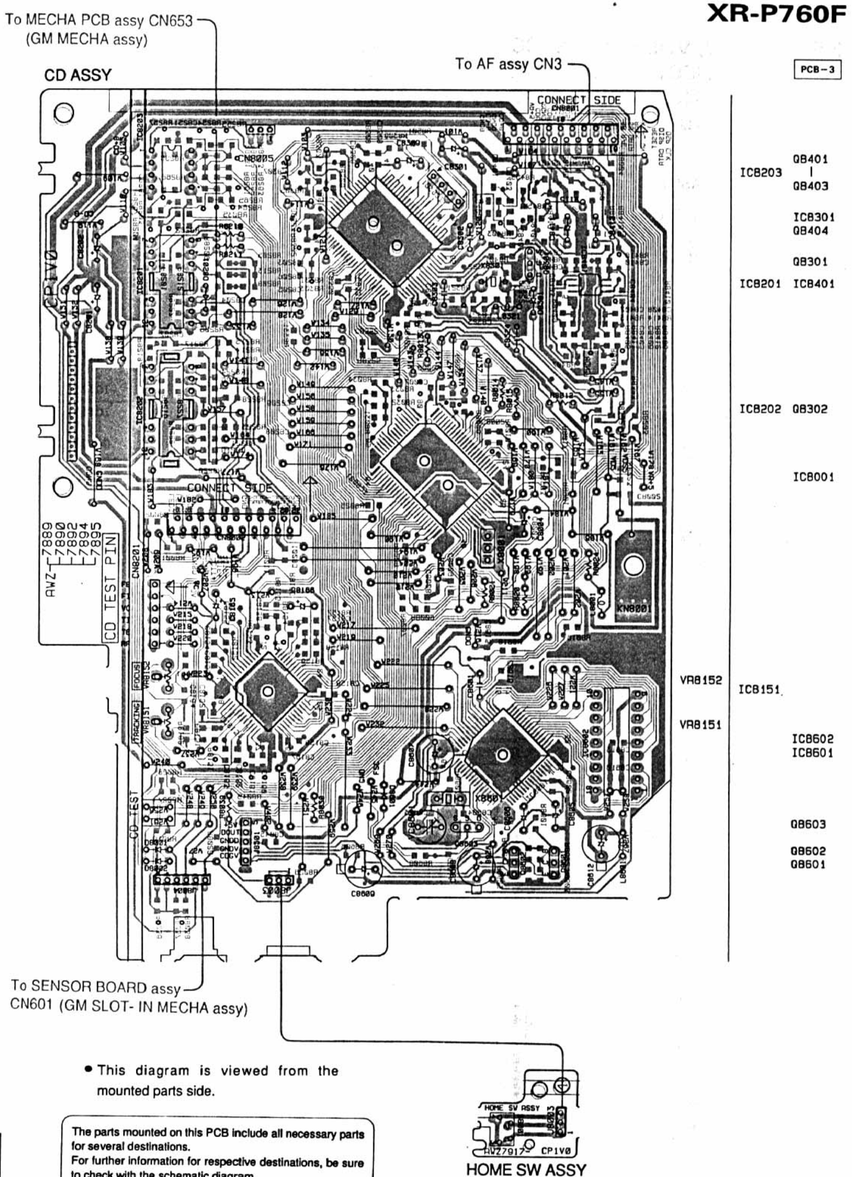
㉔ : PLAY MODE
Upper: TP1-Pin1 (RF) 1V/div
Lower: IC8151-Pin30 (DFCT)
5V/div 200μsec/div





SCH-4

CD ASSY, HOME SW ASSY



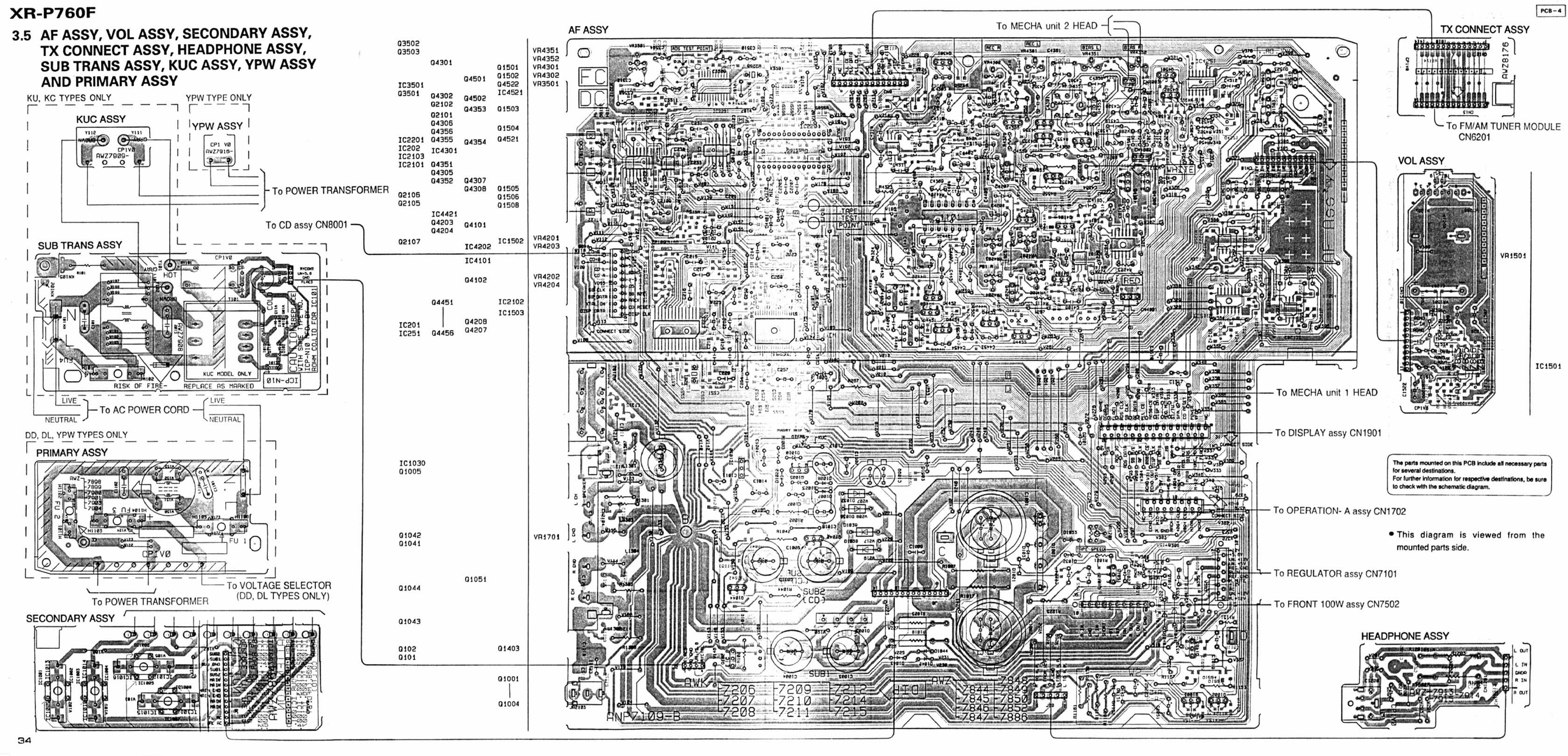
- This diagram is viewed from the mounted parts side.

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

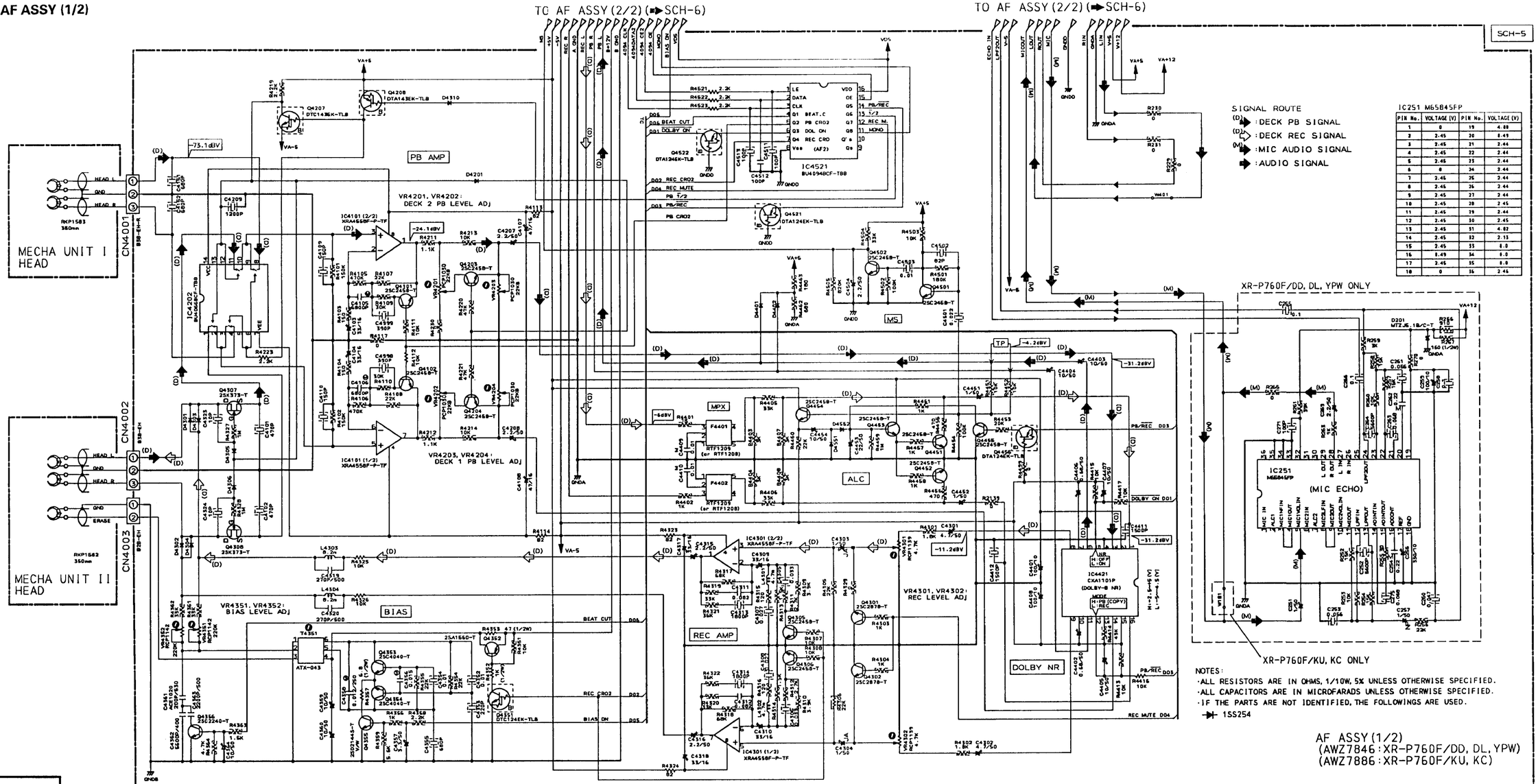
SCH-4

CD ASSY, HOME SW ASSY

3.5 AF ASSY, VOL ASSY, SECONDARY ASSY, TX CONNECT ASSY, HEADPHONE ASSY, SUB TRANS ASSY, KUC ASSY, YPW ASSY AND PRIMARY ASSY

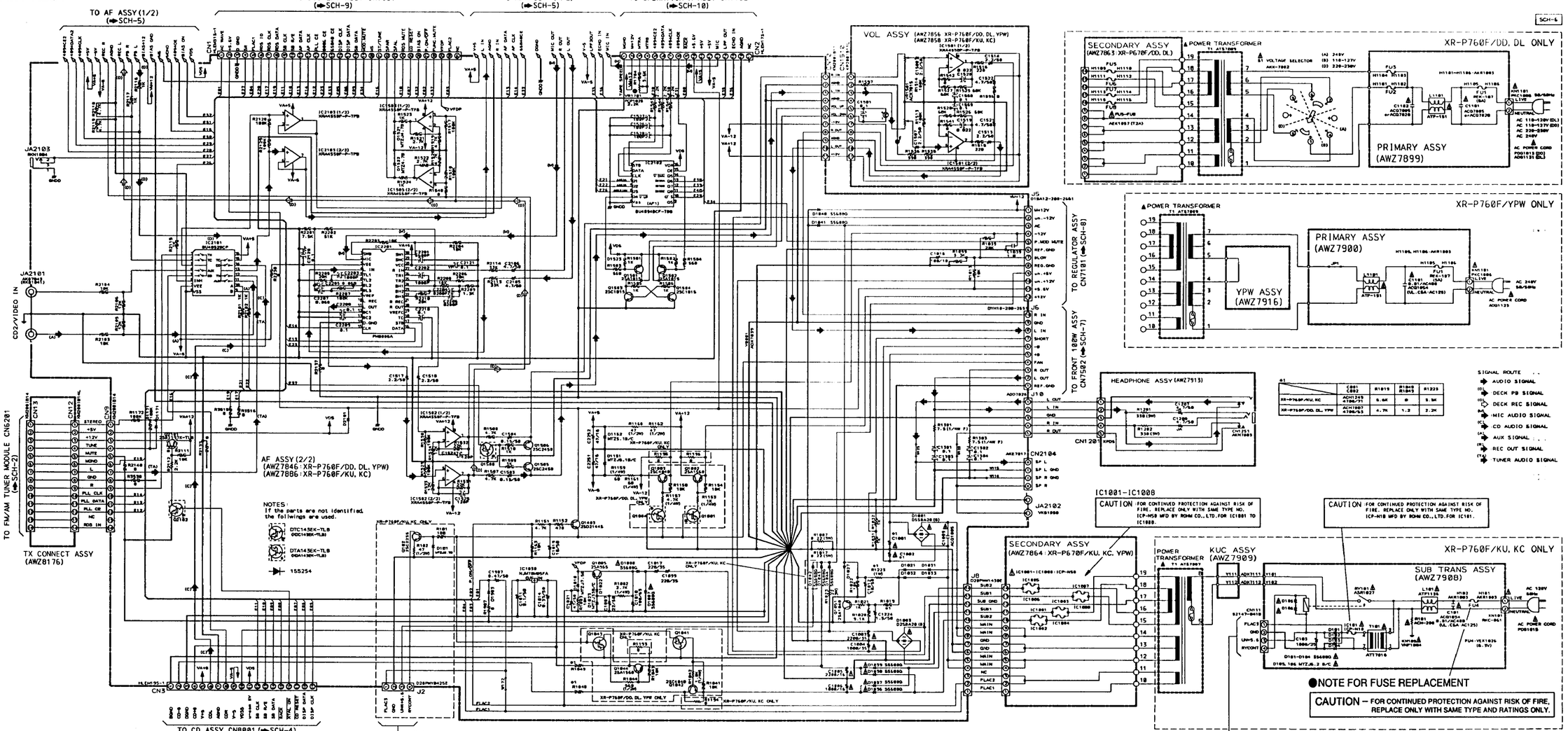

KU, KC TYPES ONLY
YPW TYPE ONLY
KUC ASSY
YPW ASSY
To POWER TRANSFORMER
To CD assy CN8001
SUB TRANS ASSY
LIVE
NEUTRAL
To AC POWER CORD
DD, DL, YPW TYPES ONLY
PRIMARY ASSY
To VOLTAGE SELECTOR (DD, DL TYPES ONLY)
To POWER TRANSFORMER
SECONDARY ASSY
AF ASSY
To MECHA unit 2 HEAD
TX CONNECT ASSY
To FM/AM TUNER MODULE CN6201
VOL ASSY
To MECHA unit 1 HEAD
To DISPLAY assy CN1901
To OPERATION- A assy CN1702
To REGULATOR assy CN7101
To FRONT 100W assy CN7502
HEADPHONE ASSY
PCB-4
The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.
• This diagram is viewed from the mounted parts side.

● AF ASSY (1/2)



PIN No.	VOLTAGE (V)	PIN No.	VOLTAGE (V)
1	0	19	4.88
2	2.45	20	2.45
3	2.45	21	2.44
4	2.45	22	2.44
5	2.45	23	2.44
6	0	24	2.44
7	2.45	25	2.44
8	2.45	26	2.44
9	2.45	27	2.44
10	2.45	28	2.45
11	2.45	29	2.44
12	2.45	30	2.45
13	2.45	31	4.82
14	2.45	32	2.15
15	2.45	33	0.0
16	2.49	34	0.0
17	2.45	35	0.0
18	0	36	2.46

● AF ASSY (2/2), VOL ASSY, SECONDARY ASSY, TX CONNECT ASSY, HEADPHONE ASSY, SUB TRANS ASSY, KUC ASSY, YPW ASSY AND PRIMARY ASSY


TO AF ASSY(1/2) (➡SCH-5)
TO DISPLAY ASSY CN1901 (➡SCH-9)
TO AF ASSY (1/2) (➡SCH-5)
TO OPERATION-A ASSY CN1702 (➡SCH-10)
VOL ASSY (AWZ7856 XR-P760F/DD, DL, YPW) (AWZ7858 XR-P760F/KU, KC)
SECONDARY ASSY (AWZ7863 XR-P670F/DD, DL)
POWER TRANSFORMER T1 ATS7005
XR-P760F/DD, DL ONLY
PRIMARY ASSY (AWZ7899)
XR-P760F/YPW ONLY
PRIMARY ASSY (AWZ7900)
YPW ASSY (AWZ7916)
TO REGULATOR ASSY CN7101 (➡SCH-8)
TO FRONT 100W ASSY CN7502 (➡SCH-7)
HEADPHONE ASSY (AWZ7913)
CD2/VIDEO IN
TO FM/AM TUNER MODULE CN5201 (➡SCH-2)
TX CONNECT ASSY (AWZ8176)
AF ASSY (2/2) (AWZ7846 XR-P760F/DD, DL, YPW) (AWZ7886 XR-P760F/KU, KC)
NOTES: If the parts are not identified, the follwings are used.
DTC143EK-TLB
DTA143EK-TLB
1SS254
SECONDARY ASSY (AWZ7864 XR-P670F/KU, KC, YPW)
IC1001-IC1008 : ICP-N50
IC1001-IC1008
CAUTION FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. ICP-N50 MFD BY ROHM CO., LTD.FOR IC1001 TO IC1008.
CAUTION FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. ICP-N1B MFD BY ROHM CO.,LTD.FOR IC101.
POWER TRANSFORMER T1 ATS7007
KUC ASSY (AWZ7909)
XR-P760F/KU, KC ONLY
SUB TRANS ASSY (AWZ7908)
●NOTE FOR FUSE REPLACEMENT
CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.
SIGNAL ROUTE
AUDIO SIGNAL
DECK PB SIGNAL
DECK REC SIGNAL
MIC AUDIO SIGNAL
CD AUDIO SIGNAL
AUX SIGNAL
REC OUT SIGNAL
TUNER AUDIO SIGNAL
TO CD ASSY CN8001 (➡SCH-4)

	C801 C802	R1019	R1845 R1845	R1223
XR-P760F/KU, KC	ACH1345 47pF/5%	6.8K	0	5.9K
XR-P760F/DD, DL, YPW	ACH1345 47pF/5%	4.7K	1.2	3.2K

SCH-6 AF ASSY (2/2), VOL ASSY, SECONDARY ASSY, TX CONNECT ASSY, HEADPHONE ASSY, SUB TRANS ASSY, KUC ASSY, YPW ASSY, PRIMARY ASSY

AF ASSY (2/2), VOL ASSY, SECONDARY ASSY, TX CONNECT ASSY, HEADPHONE ASSY, SUB TRANS ASSY, KUC ASSY, YPW ASSY, PRIMARY ASSY **SCH-6**

SCH-7

FRONT 100W ASSY (AWZ7518)

SIGNAL ROUTE
➡ : AUDIO SIGNAL ROUTE

TO AF ASSY (2/2) J6 (➡ SCH-6)

CN7502
KPD10L (KM250NA10L)

R IN
F.GND
L IN
SHORT
-B1
+B1
FAN
R OUT
L OUT
REF GND

TO REGULATOR ASSY J7601 (➡ SCH-8)

J7601
DHH07-100-2877

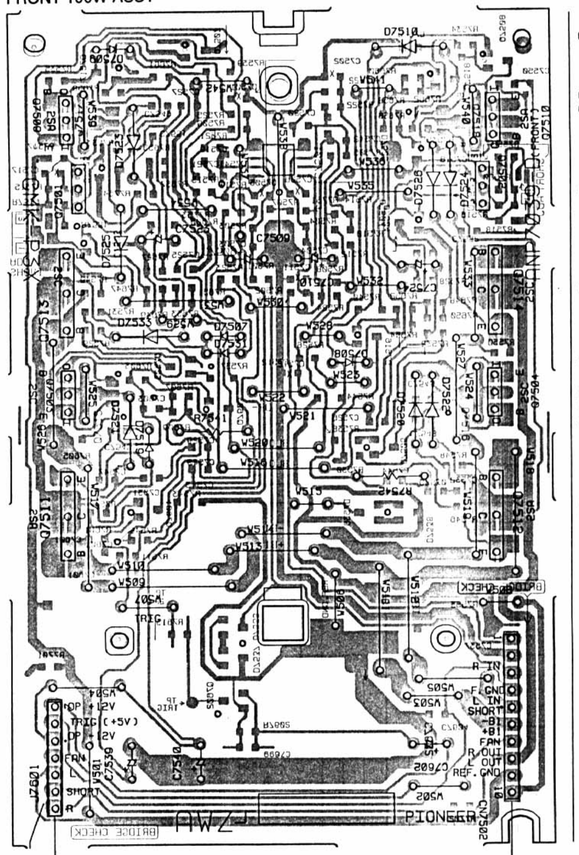
R
SHORT
L
FAN
OP-12V
TRIG
OP+12

NORMAL : 0V
BLOW : 3.5V

Q7503, Q7504, Q7509, Q7510 : POWER TRANSISTOR

PCB-5

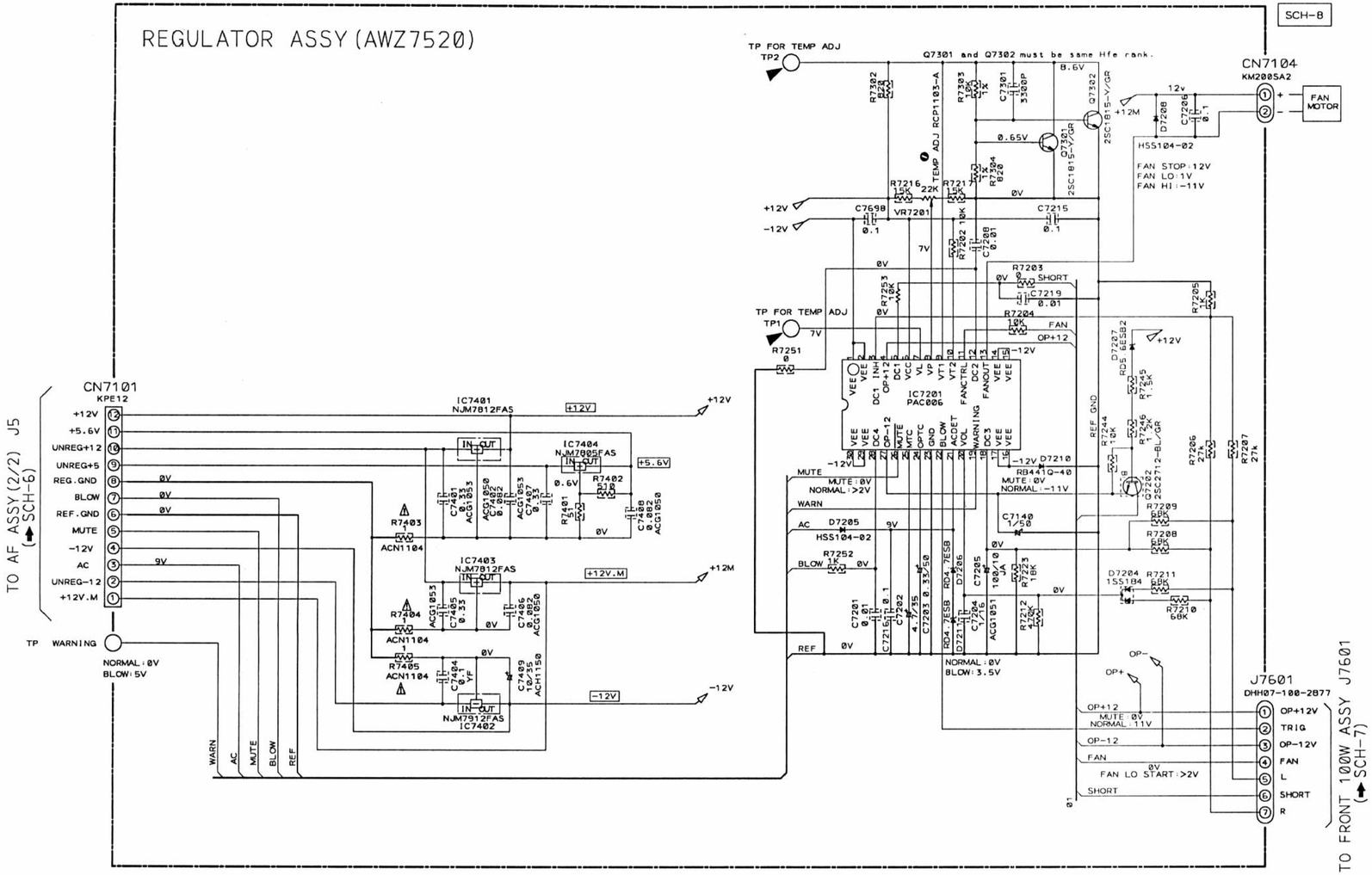
FRONT 100W ASSY



- This diagram is viewed from the mounted parts side.

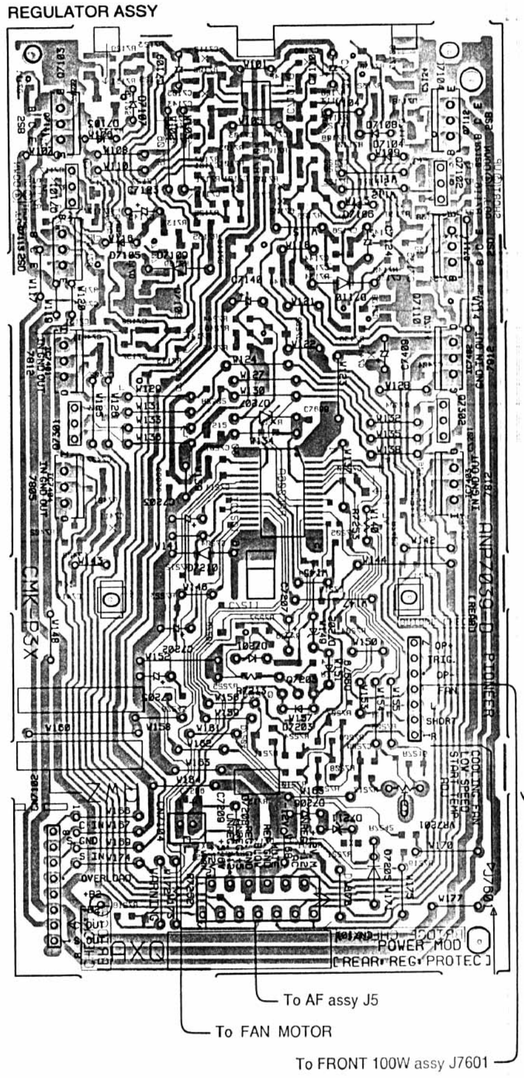
The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

3.7 REGULATOR ASSY



PCB-6

REGULATOR ASSY

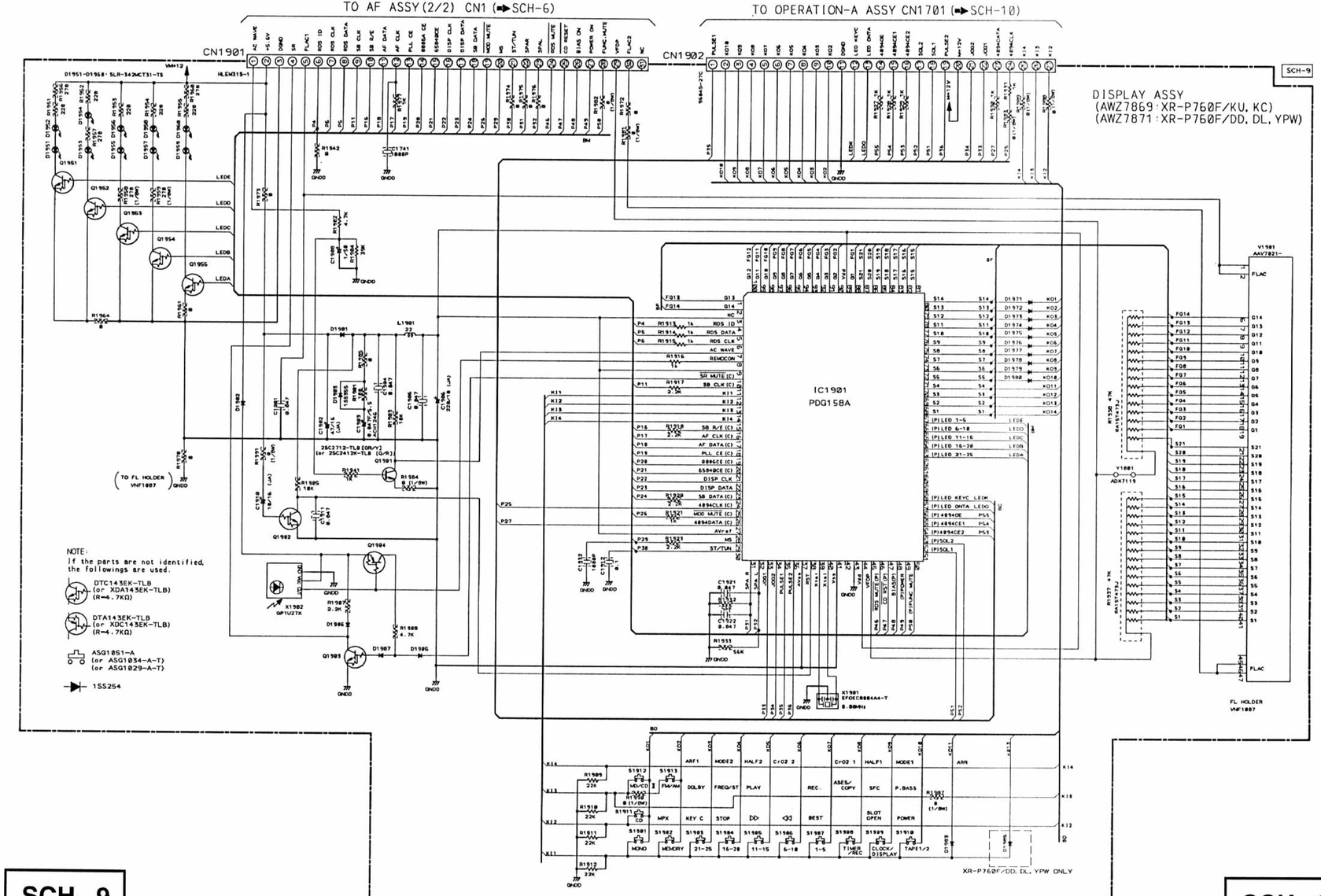


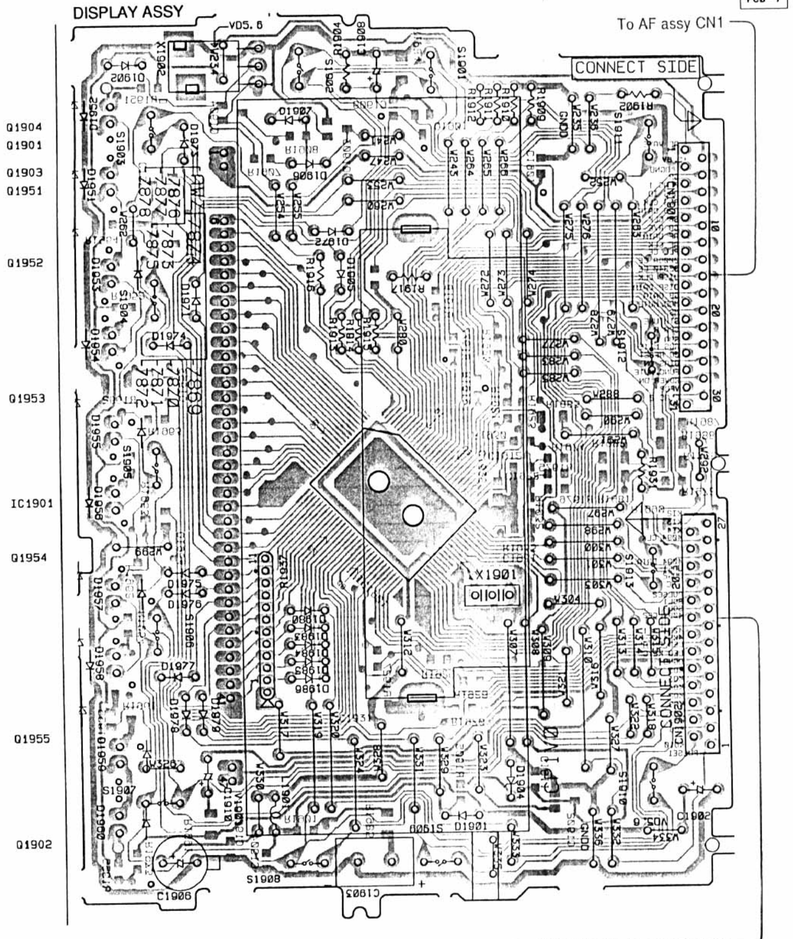
Q7103 Q7106
Q7104
Q7105 IC7101
Q7111 Q7112
Q7101 Q7102
Q7113 Q7114
Q7107
Q7109 Q7108
Q7110
Q7202
IC7401 IC7402
Q7301 Q7302
IC7404 IC7403
IC7201
Q7201
Q7203

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

- This diagram is viewed from the mounted parts side.

3.8 DISPLAY ASSY

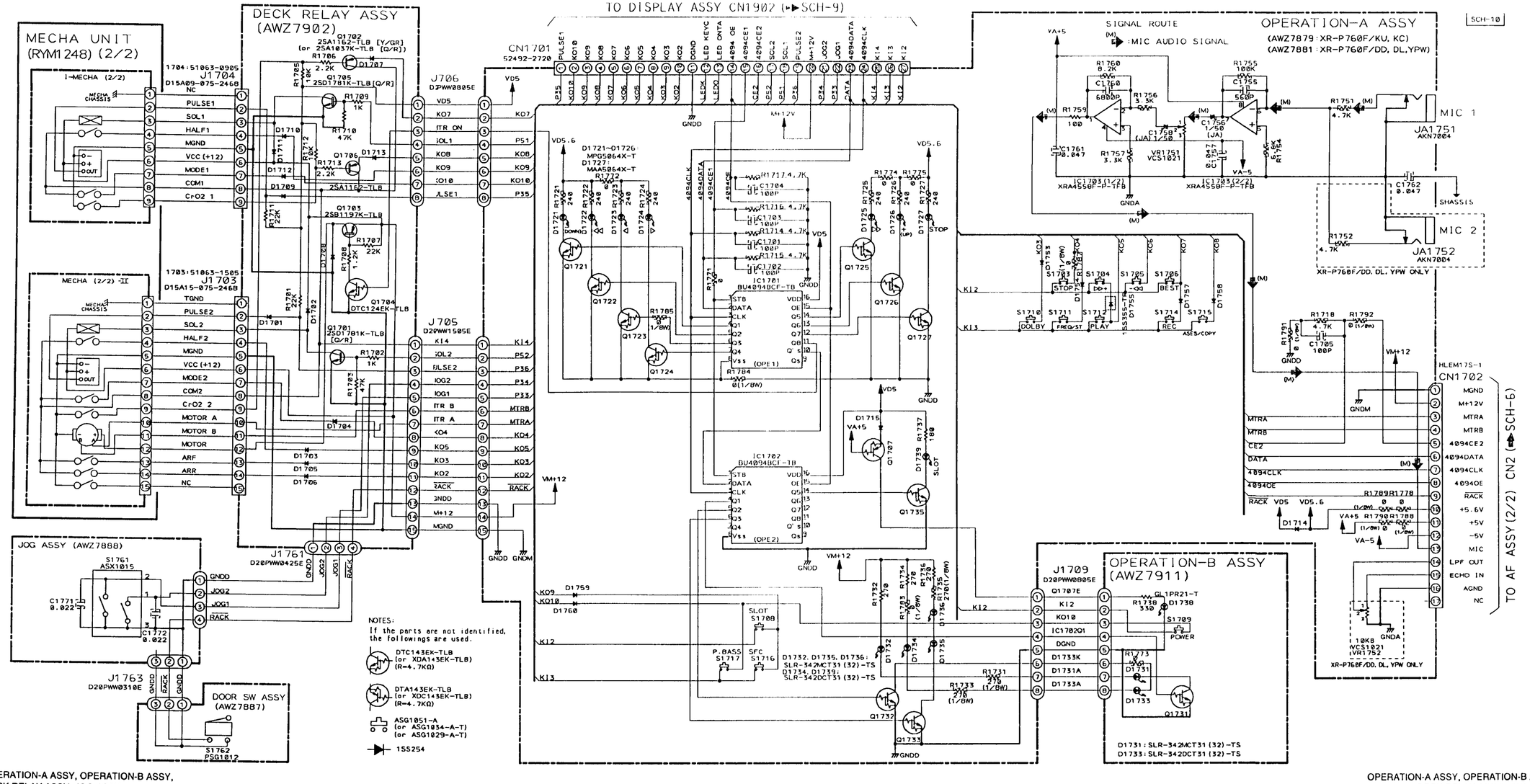




- This diagram is viewed from the mounted parts side.

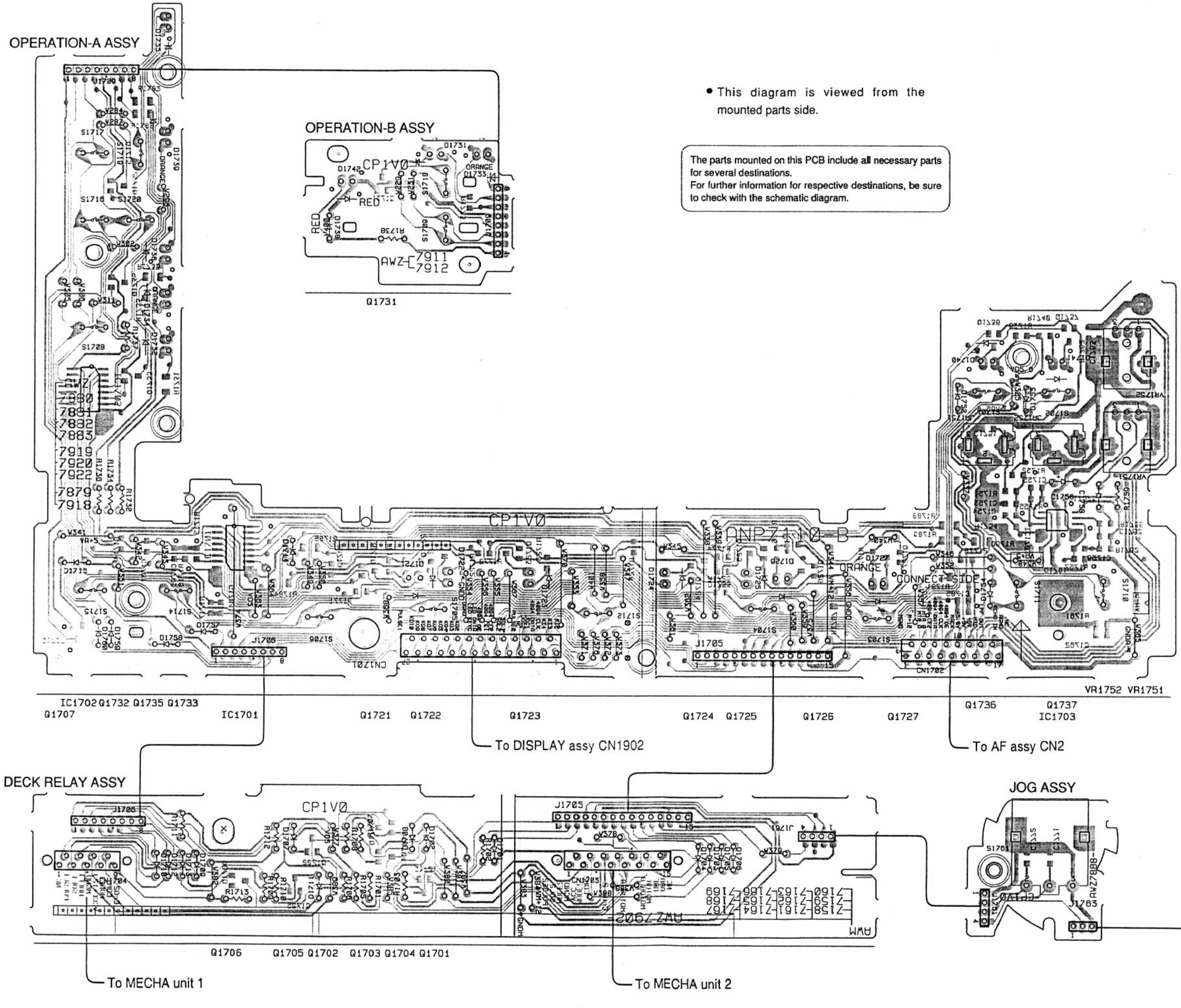
The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

3.9 OPERATION-A ASSY, OPERATION-B ASSY, DECK RELAY ASSY, JOG ASSY, DOOR SW ASSY AND MECHANISM UNIT



- This diagram is viewed from the mounted parts side.

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.



4. PCB PARTS LIST

NOTES :

- *Parts marked by "* NSP *" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "* ● *" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 x 10¹ = 561 ..... RD1/8PM 5 6 1 J
47kΩ → 47 x 10³ = 473 ..... RD1/4PS 4 7 3 J
0.5Ω → 0R5 ..... RN2H 0 R 5 K
1Ω → 010 ..... RS1P 0 1 0 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 x 10¹ = 5621 ..... RM1/4PC 5 6 2 1 F

LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol & Description	Part No.					Remarks
		KU type	KC type	DD type	DL type	YPW type	
NSP	MAIN ASSY	AWK7206	AWK7206	AWK7208	AWK7208	AWK7214	
	├ AF ASSY	AWZ7886	AWZ7886	AWZ7846	AWZ7846	AWZ7846	
	├ VOL ASSY	AWZ7858	AWZ7858	AWZ7856	AWZ7856	AWZ7856	*1
	├ SECONDARY ASSY	AWZ7864	AWZ7864	AWZ7863	AWZ7863	AWZ7864	
NSP	└ TX CONNCT ASSY	AWZ8176	AWZ8176	AWZ8176	AWZ8176	AWZ8176	
NSP	COMPLEX ASSY	AWM7158	AWM7158	AWM7160	AWM7160	AWM7161	
	├ DISPLAY ASSY	AWZ7869	AWZ7869	AWZ7871	AWZ7871	AWZ7871	
	├ OPERATION-A ASSY	AWZ7879	AWZ7879	AWZ7881	AWZ7881	AWZ7881	
NSP	├ DOOR SW ASSY	AWZ7887	AWZ7887	AWZ7887	AWZ7887	AWZ7887	
	├ JOG ASSY	AWZ7888	AWZ7888	AWZ7888	AWZ7888	AWZ7888	
	├ CD ASSY	AWZ7889	AWZ7889	AWZ7889	AWZ7889	AWZ7889	
	├ DECK RELAY ASSY	AWZ7902	AWZ7902	AWZ7902	AWZ7902	AWZ7902	
NSP	├ SUB TRANS ASSY	AWZ7908	AWZ7908	Not used	Not used	Not used	
NSP	├ KUC ASSY	AWZ7909	AWZ7909	Not used	Not used	Not used	
	├ OPERATION-B ASSY	AWZ7911	AWZ7911	AWZ7911	AWZ7911	AWZ7911	
NSP	├ HEADPHONE ASSY	AWZ7913	AWZ7913	AWZ7913	AWZ7913	AWZ7913	
NSP	├ HOME SW ASSY	AWZ7917	AWZ7917	AWZ7917	AWZ7917	AWZ7917	
	├ PRIMARY ASSY	Not used	Not used	AWZ7899	AWZ7899	AWZ7900	
	└ YPW ASSY	Not used	Not used	Not used	Not used	AWZ7916	
	FM/AM TUNER MODULE	AXQ1012	AXQ1012	AXQ1012	AXQ1012	AXQ1012	
	POWER AMP MODULE	AXQ7017	AXQ7017	AXQ7017	AXQ7017	AXQ7017	
	├ FRONT 100W ASSY	AWZ7518	AWZ7518	AWZ7518	AWZ7518	AWZ7518	
	└ REGULATOR ASSY	AWZ7520	AWZ7520	AWZ7520	AWZ7520		
NSP	GM MECHA ASSY	AXA7026	AXA7026	AXA7026	AXA7026	AXA7026	
NSP	├ LO MECHANISM BOARD ASSY	AWX7013	AWX7013	AWX7013	AWX7013	AWX7013	
NSP	│ ├ MECHA PCB ASSY	AWZ7835	AWZ7835	AWZ7835	AWZ7835	AWZ7835	
NSP	│ ├ SENSOR PCB ASSY	AWZ7836	AWZ7836	AWZ7836	AWZ7836	AWZ7836	
NSP	│ ├ MOTOR PCB ASSY	AWZ7837	AWZ7837	AWZ7837	AWZ7837	AWZ7837	
NSP	│ └ SW PCB ASSY	AWZ7838	AWZ7838	AWZ7838	AWZ7838	AWZ7838	
NSP	└ SERVO MECHANISM ASSY GM	AXA7028	AXA7028	AXA7028	AXA7028	AXA7028	
	└ MECHANISM BOARD ASSY	PWX1192	PWX1192	PWX1192	PWX1192	PWX1192	
NSP	GM SLOT-IN MECHA ASSY	AXA7027	AXA7027	AXA7027	AXA7027	AXA7027	
NSP	└ SL MECHANISM BOARD ASSY	AWX7014	AWX7014	AWX7014	AWX7014	AWX7014	
NSP	├ SENSOR BOARD ASSY	AWZ7839	AWZ7839	AWZ7839	AWZ7839	AWZ7839	
NSP	├ LED BOARD ASSY	AWZ7840	AWZ7840	AWZ7840	AWZ7840	AWZ7840	
NSP	└ MOTOR BOARD ASSY	AWZ7841	AWZ7841	AWZ7841	AWZ7841	AWZ7841	

*Note *1: Although AWZ7858 and AWZ7856 are different in part number, they have the same service parts.*

PARTS LIST FOR XR-P760F/KU

Mark	No.	Description	Parts No.
	AF ASSY		
	SEMICONDUCTORS		
	IC2101		BU4052BCF
	IC4202		BU4066BCF
	IC2102, IC4521		BU4094BCF
	IC4421		CXA1101P
	IC1030		NJM78M05FA
	IC2201		PM0006A
	IC1502, IC1503, IC2103, IC4101, IC4301		XRA4558F-P
	Q1501, Q1502		2SA1015
	Q1051		2SA1048
	Q4352		2SA1560
	Q1005		2SA965
	Q2101		2SB1197K
	Q1503, Q1504		2SC1815
	Q102		2SC2235
	Q4356		2SC2240
	Q1505, Q1506, Q4101, Q4102		2SC2458
	Q4203, Q4204, Q4305, Q4306		2SC2458
	Q4451–Q4455, Q4501, Q4502		2SC2458
	Q4301, Q4302		2SC2878
	Q4353, Q4354		2SC4040
	Q1403, Q4355		2SD2144S
	Q4307, Q4308		2SK373
	Q4456, Q4521, Q4522		DTA124EK
	Q1508, Q4208		DTA143EK
	Q4351		DTC124EK
	Q2102, Q4207		DTC143EK
	D1021, D1022, D1027, D1031–D1033		1SS254
	D1171, D1523, D1903, D2101, D4201		1SS254
	D4301–D4306, D4310, D4401, D4402		1SS254
	D4551, D4552		1SS254
!	D1003		D2SBA20 (B)
!	D1001		D5SBA20 (B)
	D101		MTZJ2.7B
	D1023		MTZJ33B
	D1521, D1522		MTZJ4.7B
	D1151, D1152		MTZJ5.1B
	D1010		MTZJ7.5B
!	D1007, D1008, D1036–D1039		S5688G
	D1040–D1042, D1044		S5688G
	COILS AND FILTERS		
	L4301, L4302		LTA472J
	L4303, L4304		LTA822J
	F4401, F4402		RTF1209
	TRANSFORMERS		
	T4351		ATX-043
	CAPACITORS		
	C4361 (2000pF/630V)		ACE1020
	C1009 (0.01 μF/150V)		ACG1005
	C1001, C1002 (4700 μF/63V)		ACH1249
	C4319, C4320		CCCSL271K500
	C4323, C4324		CCSQCH100D50
	C1526–C1528, C4511, C4513		CCSQCH101J50
	C1524, C1525		CCSQCH121J50
	C4109, C4110		CCSQCH151J50
	C4353		CCSQCH221J50
	C4998, C4999		CCSQCH391J50
	C4101, C4102		CCSQCH471J50
	C4151, C4152, C4355		CCSQCH681J50
	C4502		CCSQCH820J50
	C4451, C4452		CEAS010M50
	C1011		CEAS0R1M50
	C1012, C1019, C4359, C4360, C4364		CEAS100M50
	C4403–C4405, C4407, C4454		CEAS100M50
	C1016, C4401, C4408		CEAS101M10
	C1018		CEAS101M63
	C1006		CEAS102M16
	C1004		CEAS102M35
	C1224		CEAS1R5M50
	C1007, C4453		CEAS220M50
	C1017, C1099		CEAS221M35
	C1005		CEAS222M16
	C1003		CEAS222M35
	C1517, C1518, C4207, C4208		CEAS2R2M50
	C4315, C4316, C4504		CEAS2R2M50
	C4103, C4104, C4309, C4310		CEAS330M16
	C4317, C4318		CEAS330M16
	C4357		CEAS3R3M50
	C2251, C2252, C4107, C4108		CEAS470M16
	C1021		CEAS470M50
	C2105, C2106, C4301, C4302		CEAS4R7M50
	C1503, C1504		CEASR15M50
	C1014		CEASR33M50
	C1907		CEASR47M50
	C4402, C4406		CEASR68M50
	C4303, C4304		CEJA010M50
	C1039		CFTXA105J50
	C4512		CKCYB101K50
	C4363		CKCYB222K500
	C2202, C2203		CKSQYB102K50
	C4352, C4354, C4503		CKSQYB103K50
	C4209		CKSQYB122K50
	C4411, C4412		CKSQYB152K50
	C4313, C4314		CKSQYB182K50
	C4501		CKSQYB223K50
	C4307, C4308		CKSQYB273K50
	C4305, C4306		CKSQYB333K50
	C2201		CKSQYB562K50
	C2204, C2206		CKSQYB822K50
	C1301–C1304, C2120, C2121		CKSQYF104Z50
	C2208–C2210		CKSQYF104Z50
	C4409, C4410		CQMA103J50
	C4358		CQMA123K250
	C4356		CQMA153J50
	C4362		CQMA562K400
	C4105, C4106		CQMA682J50
	C2205, C2207		CQMA683J50
	C4311, C4312		CQMA823J50
	RESISTORS		
	VR1701 (2.2kΩ)		PCP1025
	VR4201–VR4204 (22kΩ)		PCP1030
	VR4301, VR4302 (4.7kΩ)		RCP1139
	VR4351, VR4352 (220kΩ)		RCP1142
	R4352		RD1/2PM102J
	R1160, R1162, R4353		RD1/2PM470J
	R102		RD1/2PM680J
	R4357		RD1/2PM6R8J
	R1002		RD1/4PM272J
	R1159, R1161		RD1/4PM680J

Mark	No.	Description	Parts No.
	R1301, R1303		RD1/4PMF7R5J
	R1021		RD1/6PM102J
	R1003, R4112, R4325, R4326, R4416		RD1/6PM103J
	R4223, R4521–R4523		RD1/6PM222J
	R1151		RD1/6PM472J
	R4113, R4114, R4323, R4324		RD1/6PM820J
	R1223		RS1LMF332J
	R1023		RS3LMF220J
	R1007, R1017		RS3LMFR22J
	Other Resistors		RS1/10S□□□J
OTHERS			
		12P CABLE HOLDER	51063–1205
	Y1	BOARD-IN READ WIRE	ADX7039
	JA2101	PIN JACK 2P	AKB7043
	CN2104	SPEAKER TERMINAL 4P	AKE7017
	CN4003	2P TOP POST	B2B–EH
	CN4002	3P TOP POST	B3B–EH
	CN4001	3P TOP POST	B3B–EH–R
	CN2	17P FFC CONNECTOR	HLEM17S–1
	CN3	19P FFC CONNECTOR	HLEM19S–1
	CN1	31P FFC CONNECTOR	HLEM31S–1
	CN10	11P PLUG	KM200IB11
	CN9	14P PLUG	KM200IB14
	JA2103	REMOTE CONTROL JACK	RKN1004
		PCB BINDER	VEF1040
	JA2102	PIN JACK 2P	VKB1050

VOL ASSY

SEMICONDUCTORS

	IC1501		XRA4558F–P

CAPACITORS

	C1507, C1508, C1513, C1514		CEAS2R2M50
	C1521, C1522		CEYA4R7M50
	C1558, C1559		CKSQYB104K25
	C1519, C1520		CKSQYB223K50
	C1501		CKSQYF104Z50

RESISTORS

	VR1501 (100kΩ–A5×2)		ACX7015
	Other Resistors		RS1/10S□□□J

OTHERS

	CN1510	11P SOCKET	KP200IB11L

SECONDARY ASSY

SEMICONDUCTORS

⚠1	IC1001–IC1008		ICP–N50

TX CONNECT ASSY

OTHERS

	CN13	14P PLUG	KM200IB14
	CN12	14P SOCKET	KP200IB14L

DISPLAY ASSY

SEMICONDUCTORS

	IC1901		PDG158A
	Q1901		2SC2712
	Q1904		DTA143EK
	Q1902, Q1903, Q1951–Q1955		DTC143EK
	D1901, D1902, D1905–D1907		1SS254
	D1971–D1980, D1983		1SS254
	D1903		1SS355
	D1951–D1960		SLR–342MCT31

COILS AND FILTERS

	L1901		LAU220J

SWITCHES AND RELAYS

	S1901–S1913		ASG1051

CAPACITORS

	C1903 (0.047F/5.5V)		ACH1246
	C1908		CEJA010M50
	C1910		CEJA100M16
	C1906		CEJA221M10
	C1902		CEJA470M16
	C1932, C1941		CKSQYB102K50
	C1921, C1922		CKSQYB473K50
	C1912		CKSQYF104Z50
	C1901, C1904, C1905, C1911		CKSQYF473Z50

RESISTORS

	R1937, R1938		RA15T473J
	R1913–R1916, R1931		RD1/6PM102J
	R1917		RD1/6PM222J
	R1909–R1912		RD1/6PM223J
	R1904		RD1/6PM393J
	R1902		RD1/6PM472J
	R1981–R1984, R1987–R1991		RS1/8S000J
	R1958, R1959		RS1/8S271J
	Other Resistors		RS1/10S□□□J

OTHERS

	CN1902	31P FFC CONNECTOR	9604S–27C
	V1901	FL TUBE	AAV7021
		FL SPACER	AEB7047
		REMOTE RECEIVER UNIT	GP1U27X
	CN1901	31P FFC CONNECTOR	HLEM31S–1
		FL HOLDER	VNF1087
	X1901		EFOEC8004A4

OPERATION–A ASSY

SEMICONDUCTORS

	IC1701, IC1702		BU4094BCF
	IC1703		XRA4558F–P
	Q1707		DTA143EK
	Q1721		DTC124EK
	Q1722–Q1727, Q1732, Q1733, Q1735		DTC143EK
	D1714, D1715, D1753, D1754		1SS254
	D1757–D1760		1SS254
	D1755		1SS355
	D1727		MAA5064X
	D1721–D1726		MPG5064X
	D1734, D1739		SLR–342DCT31
	D1732, D1735, D1736		SLR–342MCT31

SWITCHES AND RELAYS

	S1703–S1706, S1708, S1710–S1712		ASG1051
	S1714–S1717		ASG1051

Mark	No.	Description	Parts No.
CAPACITORS			
	C1701–C1705		CCSQCH101J50
	C1755		CCSQCH561J50
	C1756, C1758		CEJA010M50
	C1760		CKSQYB682K50
	C1757, C1761, C1762		CKSQYF473Z50
RESISTORS			
	VR1751 (10kΩ–B)		VCS1021
	R1759		RD1/6PM101J
	R1737		RD1/6PM181J
	R1732, R1734, R1736		RD1/6PM271J
	R1784, R1785, R1787–R1792		RS1/8S000J
	R1731, R1733, R1735		RS1/8S271J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN1701	FFC CONNECTOR 27P	52492–2720
	JA1751	SR JACK	AKN7004
	CN1702	FFC CONNECTOR 17P	HLEM17S–1
DOOR SW ASSY			
SWITCHES AND RELAYS			
	S1762		PSG1012
JOG ASSY			
SWITCHES AND RELAYS			
	S1761		ASX1015
CAPACITORS			
	C1771, C1772		CKSQYB223K50
CD ASSY			
SEMICONDUCTORS			
	IC8151		CXA1372Q
	IC8301		CXD2508AQ
	IC8203		LA6517
	IC8201, IC8202		LA6520
	IC8001		PD4664A
	IC8401		XRA4558F–P
	Q8401, Q8402		2SD2114K
	Q8301		2SK246
	Q8302		DTA124EK
	Q8403, Q8404		DTA143EK
	D8001, D8002, D8301		1SS254
	D8401, D8402		DAN202K
	D8201		MTZJ6.2B
COILS AND FILTERS			
	L8321		LAU1R2J
	L8001		LAU220J
CAPACITORS			
	C8322		CCSQCH100D50
	C8006, C8007, C8350, C8351		CCSQCH101J50
	C8407–C8410		CCSQCH121J50
	C8323		CCSQCH220J50
	C8403–C8406		CCSQCH271J50
	C8401, C8402		CCSQCH391J50
	C8411, C8412		CEANP2R2M50
	C8004		CEAS101M10
	C8201, C8202, C8301		CEAS330M16
	C8165, C8166		CEAS4R7M50
	C8309		CEASR47M50
	C8302, C8303		CGCYX104M16
	C8162, C8321		CKSQYB102K50
	C8152, C8157, C8160		CKSQYB103K50
	C8306		CKSQYB152K50
	C8352		CKSQYB223K50
	C8161		CKSQYB332K50
	C8151, C8159		CKSQYB333K50
	C8163		CKSQYB472K50
	C8002, C8003, C8307		CKSQYB473K50
	C8164		CKSQYB561K50
	C8045, C8158, C8203–C8209, C8261		CKSQYF103Z50
	C8153–C8156, C8167, C8420, C8421		CKSQYF104Z50
RESISTORS			
	VR8151, VR8152 (22kΩ)		RCP1103
	R8013–R8015		RD1/6PM102J
	R8210, R8211		RD1/6PM104J
	R8012		RD1/6PM472J
	R8020, R8021, R8024, R8030		RD1/6PM473J
	R8039		RD1/6PM563J
	R8901		RS1/8S000J
	R8017		RS1/8S102J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN8001	FFC CONNECTOR 19P	HLEM19S–1
	CN8002	FFC CONNECTOR 22P	HLEM22S–1
	CN8201	6P SIDE POST	VKN–004
	X8301 (33.8688MHz)		ASS7000
	X8001 (4.19MHz)		VSS1014
DECK RELAY ASSY			
SEMICONDUCTORS			
	Q1702, Q1706		2SA1162
	Q1703		2SB1197K
	Q1701, Q1705		2SD1781K
	Q1704		DTC124EK
	D1701–D1713		1SS254
RESISTORS			
	All Resistors		RD1/6PM□□□J
OTHERS			
		9P CABLE HOLDER	51063–0905
		15P CABLE HOLDER	51063–1505
SUB TRANS ASSY			
SEMICONDUCTORS			
⚠	IC101		ICP–N10
	D105, D106		MTZJ6.2B
	D101–D104		S5688G
COILS AND FILTERS			
⚠	L101		ATF1136
TRANSFORMERS			
⚠	T101		ATT7016

Mark	No.	Description	Parts No.
	SWITCHES AND RELAYS		
!	RY101		ASR1027
	CAPACITORS		
!	C101 (0.01/400V)		ACG1054
	C103		CEAS102M25
	RESISTORS		
	R101 (2.2MΩ, 1/2W)		ACN-208
	OTHERS		
	CN111	4P JUMPER CONNECTOR	52147-0410
	H101, H102	FUSE CLIP	AKR1003
		TERMINAL	RKC-061
	KN105	EARTH METAL FITTING	VNF1084
	KUC ASSY		
	OTHERS		
	Y112	BOARD-IN READ WIRE	ADX7112
	OPERATION-B ASSY		
	SEMICONDUCTORS		
	Q1731		DTC143EK
	D1738		GL1PR21
	D1733		SLR-342DCT31
	D1731		SLR-342MCT31
	SWITCHES AND RELAYS		
	S1709		ASG1051
	RESISTORS		
	R1738		RD1/6PM331J
	Other Resistors		RS1/10S□□□J
	HEADPHONE ASSY		
	CAPACITORS		
	C1207, C1208		CEJA4R7M50
	RESISTORS		
	R1201, R1202		RS3LMF331J
	OTHERS		
		HEADPHONE JACK	AKN7003
	HOME SW ASSY		
	SWITCHES AND RELAYS		
	S8001		DSG1048
	FM/AM TUNER MODULE		
	SEMICONDUCTORS		
	IC6201		LA1836M
	IC6202		LM7001J
	Q6102		2SC2223
	Q6203		2SC2235
	Q6202		2SC2712
	Q6103, Q6214		2SC2714
	Q6201		2SK208
	Q6104		2SK302
	Q6101		3SK194
	Q6204		XDA124EK
	Q6217		XDC124EK
	D6101, D6102		1T33
	COILS AND FILTERS		
	L6104		ATC1003
	L6101		ATC1020
	L6102		ATC1021
	L6207 (10.7MHz)		ATE1013
	F6203, F6204		ATF-119
	F6101		ATF-155
	F6202 (450kHz)		ATF1155
	L6103 (2.2μH)		ATH1043
	L6202, L6203, L6208		LCTA2R2J3225
	TRANSFORMERS		
	T6101		ATE-063
	CAPACITORS		
	C6202, C6234, C6236 (1μF/16V)		ACG1051
	C6107		CCSCH010C50
	C6229		CCSCH821J50
	C6110		CCSQCH020C50
	C6101		CCSQCH050C50
	C6108, C6203, C6268		CCSQCH101J50
	C6111, C6116, C6208, C6221, C6222		CCSQCH150J50
	C6115		CCSQCH330J50
	C6114		CCSQRH080D50
	C6113		CCSQRH180J50
	C6105		CCSQTH150J50
	C6261		CEAS010M50
	C6224, C6246, C6262		CEAS100M50
	C6227		CEAS101M10
	C6216, C6217		CEAS330M16
	C6231, C6233		CEAS3R3M50
	C6219		CEAS470M10
	C6243-C6245		CEAS470M16
	C6238		CEJA100M16
	C6249, C6250		CEJA4R7M35
	C6215		CFTXA103J50
	C6214		CFTXA224J50
	C6103, C6106, C6112, C6204		CKSQYB102K50
	C6102, C6109, C6117, C6210, C6264		CKSQYB103K50
	C6213		CKSQYB223K50
	C6230		CKSQYB333K50
	C6228, C6252		CKSQYB472K50
	C6209, C6237, C6265, C6267		CKSQYB473K50
	C6212, C6218		CKSQYF103Z50
	C6220, C6226, C6239, C6242, C6255		CKSQYF223Z50
	C6235		CKSQYF224Z25
	C6225, C6241, C6266		CKSQYF473Z50
	C6232		CKSYB333K50
	C6251		CKSYB472K50
	C6223		CKSYF103Z50
	C6263		CKSYF473Z50
	RESISTORS		
	VR6201 (10kΩ)		ACP1056
	VR6202		VRTB6VS223
	R6299, R6300		RD1/8PM102J
	R6113, R6116, R6118, R6268-R6271		RS1/8S000J
	R6275, R6276, R6278, R6283, R6284		RS1/8S000J

Mark	No.	Description	Parts No.
	R6290, R6293, R6294, R6297		RS1/8S000J
	R6243, R6244		RS1/8S101J
	R6211		RS1/8S103J
	R6237		RS1/8S182J
	R6209		RS1/8S221J
	R6239		RS1/8S332J
	R6101		RS1/8S470J
	Other Resistors		RS1/10S□□□J
OTHERS			
	BN6201	ANTENNA TERMINAL 4-P	AKA1016
	CN6201	14P SOCKET	KP200IA14L
	X6203 (7.200MHz)		ASS1042
	X6201 (456KHz)		ASS1066
	X6202 (450kHz)		ATF1027
	AM RF TUNING BLOCK		AXX1041

FRONT 100W ASSY

SEMICONDUCTORS

	IC7501	UPC4570G2 (5)
	Q7507, Q7508	2SA1182
	Q7601	2SA1255
	Q7501, Q7502	2SC2240
	Q7505, Q7506	2SC2859
	Q7602, Q7603	2SC3138
	D7505, D7506, D7517, D7518	1SS181
	D7503, D7504, D7516	1SS184
	D7535–D7538	1SS226
	D7521–D7524	1SS244
	D7519, D7520, D7525, D7526, D7531	HSS104–02
	D7533	HSS104–02
	D7507–D7510	RD3.3ESB2

CAPACITORS

	C7519–C7522, C7545–C7552	CCSQCH101J50
	C7525–C7528	CCSQCH271J50
	C7503, C7504	CCSQCH331J50
	C7541, C7542	CCSQCH470J50
	C7523, C7524	CEALR10M50
	C7509, C7510	CEAS101M10
	C7602	CEJA221M6R3
	C7540	CEJA3R3M50
	C7539	CEJA4R7M50
	C7699	CKSQYB104K25
	C7529–C7532	CKSQYB333K50
	C7543, C7544	CKSQYB472K50
	C7601, C7603	CKSQYF104Z50
	C7537	CKSQYF473Z50

RESISTORS

	R7515, R7516 (1.8kΩ)	ACN1107
⚠	R7541, R7542	RD1/4PMF100J
	R7519, R7520	RN1/10SE621D
⚠	R7547–R7550	RS1/10S2200F
	R7753	RS1/8S000J
⚠	R7537–R7540	RS1/8S100J
	R7553	RS1/8S101J
⚠	R7543, R7544	RS1/8S7R5J
	Other Resistors	RS1/10S□□□J

Mark	No.	Description	Parts No.

REGULATOR ASSY

SEMICONDUCTORS

	IC7201	PAC006C
	Q7301, Q7302	2SC1815
	Q7202	2SC2712
	D7204	1SS184
	D7205, D7208	HSS104–02
	D7210	RB441Q–40
	D7206, D7211	RD4.7ESB
	D7207	RD5.6ESB2

CAPACITORS

	C7402, C7406, C7408 (0.082μF/25V)	ACG1050
	C7204 (1μF/16V)	ACG1051
	C7401, C7405, C7407 (0.33μF/50V)	ACG1053
	C7409 (10μF/35V)	ACH1150
	C7202	CEANL4R7M50
	C7140	CEAS010M50
	C7205	CEJA101M10
	C7203	CEJAR33M50
	C7697	CKDYB103K50
	C7201, C7208, C7219	CKSQYB103K50
	C7301	CKSQYB332K50
	C7206, C7215, C7216, C7404, C7698	CKSQYF104Z50

RESISTORS

	VR7201 (22kΩ)	RCP1103
⚠	R7403–R7405 (1Ω)	ACN1104
	R7252	RD1/6PM102J
	R7253	RD1/6PM103J
	R7303	RS1/10S1002F
	R7304	RS1/10S8200F
	Other Resistors	RS1/10S†††J

OTHERS

	CN7101 12P JUMPER CONNECTOR	KPE12

MECHA PCB ASSY (AWZ7835)

SEMICONDUCTORS

	Q651	DTC124ES
	D651	VRPG5615S

RESISTORS

	R652 (10kΩ)	ACN7011
	R651 (56kΩ)	ACN7012
	R653 (220Ω, 1/6W)	DCN1062
	R654 (0Ω)	DCN1065

OTHERS

	CN652 FPC CONNECTOR 12P	12FMZ-AST
	CN651 MT CONNECTOR 4P	173979-4
	CN653 22P FFC CONNECTOR	SLEM22R

SENSOR PCB ASSY (AWZ7836)

SEMICONDUCTORS

	D652	GP1S24

OTHERS

	J652 WIRE ASSY 3P	D20PWW0315E

Mark	No.	Description	Parts No.
MOTOR PCB ASSY (AWZ7837)			
OTHERS			
		LOADING MOTOR	VXM1034
SW PCB ASSY			
SWITCHES AND RELAYS			
	S651, S652		VSG1006
OTHERS			
	J656	WIRE ASSY 3P	D20PWW0315E
MECHANISM BOARD ASSY (PWX1192)			
SWITCHES AND RELAYS			
	S610		DSG1016
OTHERS			
	CN610	MT CONNECTOR 4P	173979-4
SENSOR BOARD ASSY (AWZ7839)			
SEMICONDUCTORS			
	Q601-Q603		PS3322
RESISTORS			
	R604-R606 (6.8kΩ)		ACN7010
OTHERS			
	CN601	6P JUMPER CONNECTOR	52151-0610
LED BOARD ASSY			
SEMICONDUCTORS			
	D601-D603		AN329
RESISTORS			
	R602 (390Ω)		ACN7007
	R601 (560Ω)		ACN7009
OTHERS			
	J601	WIRE ASSY 3P	D20PWW0315E
MOTOR BOARD ASSY (AWZ7841)			
OTHERS			
	J602	WIRE ASSY 3P	D20PWW03035E

■ CONTRAST OF PCB ASSEMBLIES

SECONDARY Assy

AWZ7864 and AWZ7863 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ7864	AWZ7863	
⚠	IC1001-IC1008	ICP-N50	Not used	

DISPLAY Assy

AWZ7869 and AWZ7871 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ7869	AWZ7871	
	D1985	Not used	1SS254	

OPERATION-A Assy

AWZ7879 and AWZ7881 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ7879	AWZ7881	
	VR1752 (10kΩ-B)	Not used	VCS1021	
	R1752	Not used	RS1/10S472J	
	JA1752	Not used	AKN7004	

■ PARTS LIST FOR DD, DL AND YPW TYPES

Mark	No.	Description	Parts No.
	AF ASSY (AWZ7846)		
	SEMICONDUCTORS		
	IC2101		BU4052BCF
	IC4202		BU4066BCF
	IC2102, IC4521		BU4094BCF
	IC4421		CXA1101P
	IC251		M65845FP
	IC1030		NJM78M05FA
	IC2201		PM0006A
	IC1502, IC1503, IC2103, IC4101, IC4301		XRA4558F-P
	Q1501, Q1502		2SA1015
	Q1051		2SA1048
	Q1002, Q1044, Q4352		2SA1560
	Q1005		2SA965
	Q2101		2SB1197K
	Q1503, Q1504		2SC1815
	Q4356		2SC2240
	Q1505, Q1506, Q4101, Q4102		2SC2458
	Q4203, Q4204, Q4305, Q4306		2SC2458
	Q4451–Q4455, Q4501, Q4502		2SC2458
	Q4301, Q4302		2SC2878
	Q1003, Q1042, Q4353, Q4354		2SC4040
	Q1403, Q4355		2SD2144S
	Q4307, Q4308		2SK373
	Q4456, Q4521, Q4522		DTA124EK
	Q1004, Q1041, Q1508, Q4208		DTA143EK
	Q4351		DTC124EK
	Q1001, Q1043, Q2102, Q4207		DTC143EK
	D1021, D1022, D1027, D1031–D1033		1SS254
	D1171, D1523, D1903, D2101, D4201		1SS254
	D4301–D4306, D4310, D4401, D4402		1SS254
	D4551, D4552		1SS254
!	D1003		D2SBA20 (B)
!	D1001		D5SB20F
	D1023		MTZJ33B
	D1521, D1522		MTZJ4.7B
	D1151, D1152, D201		MTZJ5.1B
	D1010		MTZJ7.5B
!	D1007, D1008, D1036–D1039		S5688G
	D1040, D1041, D1044		S5688G
	COILS AND FILTERS		
	L4301, L4302		LTA472J
	L4303, L4304		LTA822J
	F4401, F4402		RTF1209
	TRANSFORMERS		
	T4351		ATX-043
	CAPACITORS		
	C4361 (2000pF/630V)		ACE1020
	C1009 (0.01 μ F/150V)		ACG1005
	C1001, C1002 (4700 μ F/63V)		ACH7007
	C4319, C4320		CCCSL271K500
	C4323, C4324		CCSQCH100D50
	C1526–C1528, C271, C4511, C4513		CCSQCH101J50
	C1524, C1525		CCSQCH121J50
	C4109, C4110		CCSQCH151J50
	C4353		CCSQCH221J50
	C4998, C4999		CCSQCH391J50
	C4101, C4102		CCSQCH471J50
	C4151, C4152, C4355		CCSQCH681J50
	C4502		CCSQCH820J50
	C257		CEANP010M50
	C251, C4451, C4452		CEAS010M50
	C1011		CEAS0R1M50
	C1012, C1019, C4359, C4360, C4364		CEAS100M50
	C4403–C4405, C4407, C4454		CEAS100M50
	C1016, C259, C4401, C4408		CEAS101M10
	C1018		CEAS101M63
	C1006		CEAS102M16
	C1004		CEAS102M35
	C1224		CEAS1R5M50
	C1007, C4453		CEAS220M50
	C1017, C1099		CEAS221M35
	C1005		CEAS222M16
	C1003		CEAS222M35
	C1517, C1518, C269, C4207, C4208		CEAS2R2M50
	C4315, C4316, C4504		CEAS2R2M50
	C4103, C4104, C4309, C4310		CEAS330M16
	C4317, C4318		CEAS330M16
	C256		CEAS331M10
	C4357		CEAS3R3M50
	C2251, C2252, C4107, C4108		CEAS470M16
	C1021		CEAS470M50
	C2105, C2106, C4301, C4302		CEAS4R7M50
	C1503, C1504		CEASR15M50
	C1014		CEASR33M50
	C1907		CEASR47M50
	C4402, C4406		CEASR68M50
	C4303, C4304		CEJA010M50
	C1039		CFTXA105J50
	C4512		CKCYB101K50
	C4363		CKCYB222K500
	C2202, C2203		CKSQYB102K50
	C4352, C4354, C4503		CKSQYB103K50
	C265, C266		CKSQYB104K25
	C4209		CKSQYB122K50
	C4411, C4412		CKSQYB152K50
	C4313, C4314		CKSQYB182K50
	C4501		CKSQYB223K50
	C4307, C4308		CKSQYB273K50
	C4305, C4306		CKSQYB333K50
	C260		CKSQYB473K25
	C2201, C252, C264		CKSQYB562K50
	C253, C261		CKSQYB563K25
	C263, C275		CKSQYB683K25
	C2204, C2206		CKSQYB822K50
	C1301–C1304, C2120, C2121		CKSQYF104Z50
	C2208–C2210, C258		CKSQYF104Z50
	C4409, C4410		CQMA103J50
	C4358		CQMA123K250
	C4356		CQMA153J50
	C254, C262		CQMA224J50
	C4362		CQMA562K400
	C4105, C4106		CQMA682J50
	C2205, C2207		CQMA683J50
	C4311, C4312		CQMA823J50

Mark	No.	Description	Parts No.
RESISTORS			
	VR1701 (2.2kΩ)		PCP1025
	VR4201–VR4204 (22kΩ)		PCP1030
	VR4301, VR4302 (4.7kΩ)		RCP1139
	VR4351, VR4352 (220kΩ)		RCP1142
	R4352		RD1/2PM102J
	R267		RD1/2PM161J
	R1160, R1162, R4353		RD1/2PM470J
	R1044		RD1/2PM561J
	R4357		RD1/2PM6R8J
	R1153		RD1/4PM102J
	R1042		RD1/4PM182J
	R1002		RD1/4PM272J
	R1157		RD1/4PM472J
	R1159, R1161		RD1/4PM680J
	R1301, R1303		RD1/4PMF7R5J
	R1021		RD1/6PM102J
	R1003, R4112, R4325, R4326, R4416		RD1/6PM103J
	R4223, R4521–R4523		RD1/6PM222J
	R1151		RD1/6PM472J
	R4113, R4114, R4323, R4324		RD1/6PM820J
	R1223		RS1LMF222J
	R1023		RS3LMF220J
	R1007, R1017		RS3LMFR22J
	Other Resistors		RS1/10S□□□J
OTHERS			
		12P CABLE HOLDER	51063–1205
	Y1		ADX7039
	JA2101	2P PIN JACK	AKB7043
	CN2104	SPEAKER TERMINAL 4P	AKE7017
	CN4003	2P TOP POST	B2B–EH
	CN4002	3P TOP POST	B3B–EH
	CN4001	3P TOP POST	B3B–EH–R
	CN2	17P FFC CONNECTOR	HLEM17S–1
	CN3	19P FFC CONNECTOR	HLEM19S–1
	CN1	31P FFC CONNECTOR	HLEM31S–1
	CN10	11P PLUG	KM200IB11
	CN9	14P PLUG	KM200IB14
	JA2103	REMOTE CONTROL JACK	RKN1004
		PCB BINDER	VEF1040
	JA2102	2P PIN JACK	VKB1050

PRIMARY ASSY (AWZ7899)

COILS AND FILTERS			
!	L1101		ATF–151
CAPACITORS			
!	C1101 (0.01/AC250)		ACG7005
OTHERS			
	H1101–H1106	FUSE CLIP	AKR1003

PRIMARY ASSY (AWZ7900)

COILS AND FILTERS			
!	L1101		ATF–151
CAPACITORS			
!	C1101 (0.01/AC400)		ACG1054
OTHERS			
	H1105, H1106	FUSE CLIP	AKR1003

5. ADJUSTMENTS

5.1 TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98 Non modulation	80 or more	—	L6207	Adjust so that the DC voltage between IC6201-Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mV.
2	Front End Sencitivity	98	10-30	98MHz	L6102 T6101	Adjust so that the DC voltage between the IC6201-Pin 12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level.
3	Stereo Distortion	98	80	98MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
4	TUNED IND. Lighting Level	98	15±2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Notes:

- *Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM →FM.*

■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1–1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level	999	47±2	999kHz*1	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

*1: For the area using 10kHz step, frequencies should be 1000 kHz

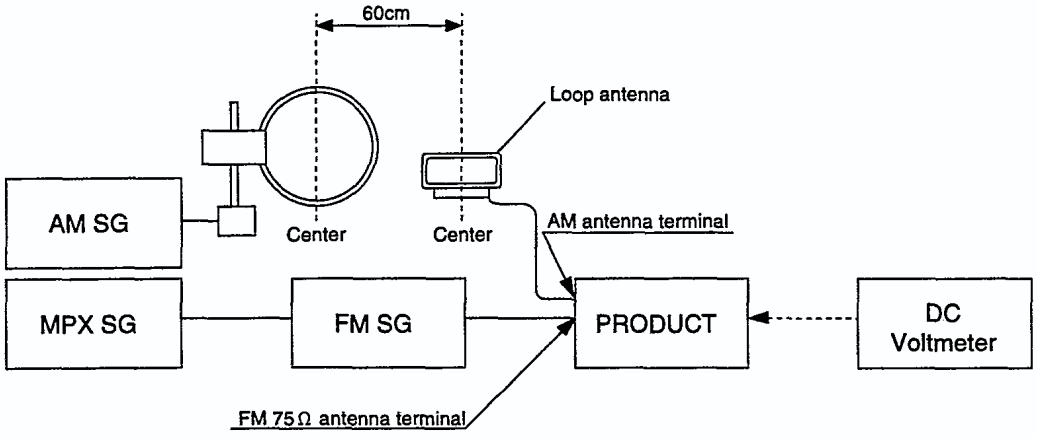


Fig. 1–1 AM and FM Adjustment Wiring Diagram

FM/AM TUNER MODULE (AXQ1012)

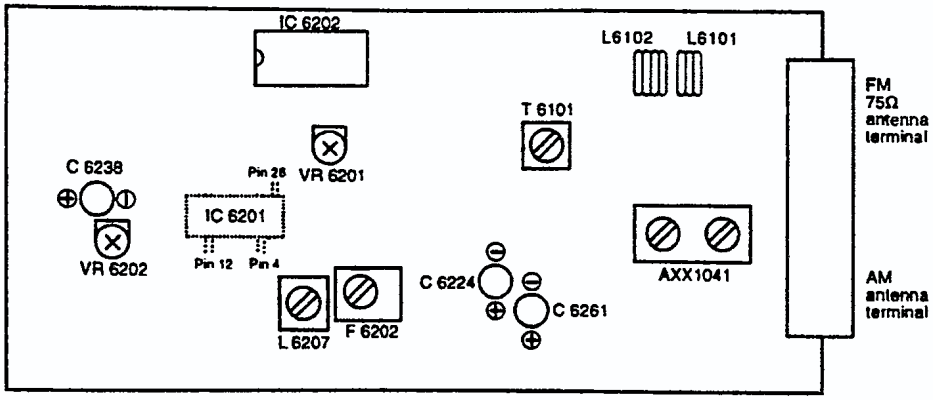


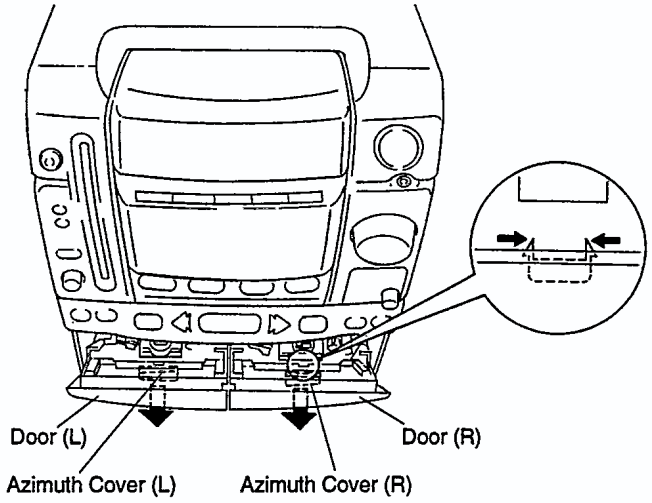
Fig. 1–2 Adjustment Points

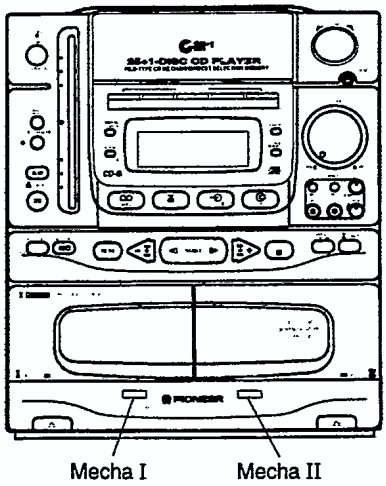
5.2 CASSETTE DECK SECTION

• Adjustment points and test points are shown in Fig. 2-3 and Fig. 2-4.

■ Before Adjustment

1. For execution of head angle adjustment, first remove the azimuth covers (L) and (R).
2. Open the cassette doors (L) and (R).
3. Insert your fingers into the cassette door, push down the two hooks at the upper side of the azimuth cover, and push them slightly out to the front. Excessive pushing at this time may make it impossible to close the cassette door.
4. Confirm that the azimuth covers (L) and (R) have been pushed out a little to the front, and then close the cassette doors (L) and (R) and remove the azimuth covers.





■ Mechanical Adjustment

• Test tape: STD-301 (3kHz, 30min).

1. Tape Speed Adjustment

No.	Mode	Test Tape	Adjusting Points	Measurement Points	Adjustment Procedure	Remarks
1	Deck I PLAY	STD-301 (Playback: 3kHz)	AF Assy VR1701	TAPE TEST POINT (Rch) (AF Assy)	Press the PLAY SW and adjust so that the reading becomes 3000Hz ±20Hz. Confirm that wow & flutter level is below 0.2% (in the reverse direction, confirm that the reading is within 3000Hz ±60Hz).	

■ Electrical Adjustment

Check the following before starting.

1. Confirm that the tape speed adjustment has been completed.
2. Clean the heads and demagnetize them using a head eraser.
3. Set the measurement level to 0 dBV = 1 Vrms.
4. Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
   STD-331E: For playback adjustment
   STD-631or STD-632: Normal blank tape
5. Provide yourself with the following measuring devides:
   - AC millivoltmeter
   - Low-frequency oscillator
   - Attenuator
   - Oscilloscope
6. Adjust both right and left channels unless otherwise specified.
7. Turn the DOLBY NR switch off unless otherwize specified.
8. Warm up the unit for several minutes before adjustment. In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
9. Always follow the indicated adjustment order. Otherwise, a complete adjustment may not be achieved.

Playback Adjustment (Decks I and II)

1. Head Azimuth Adjustment
2. Playback Level Adjustment

Recording Adjustment (Deck II)

1. Bias Oscillation Frequency Adjustment
2. Recording Bias Adjustment
3. Recording Level Adjustment.
4. ALC Operation Check

* *As the reference recording level is 250nwb/m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160nwb/m). When adjusting, pay carefull attention to the type of tape used.*

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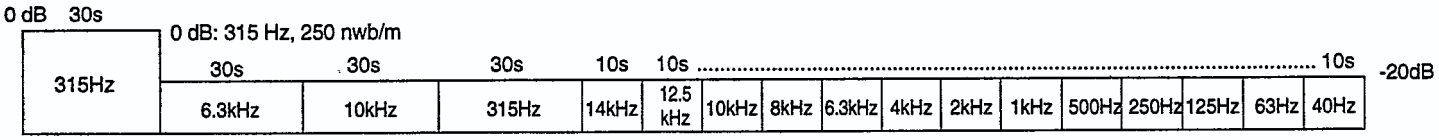


Fig. 2–1 STD-331E Test Tape

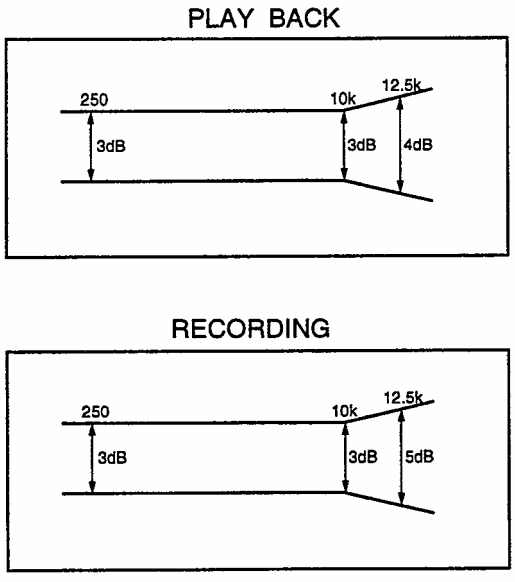


Fig. 2–2 Frequency Characteristics

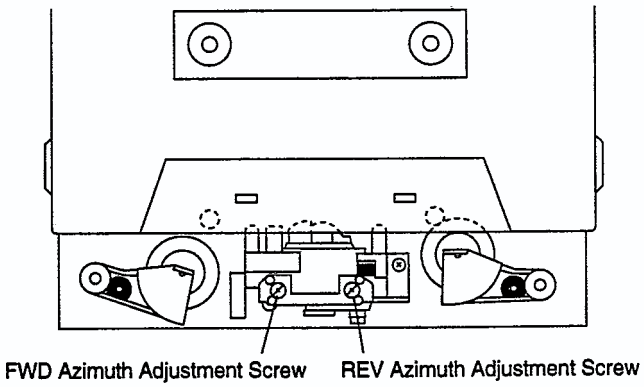


Fig. 2–3 Head Azimuth Adjustment

■ Playback Adjustment

1. Head Azimuth Adjustment

- This unit is equipped with auto tape selector.
- Do not switch between forward and reverse operation with the screwdriver inserted.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	PLAY	STD-331E test tape (Playback: 10kHz, –20dB)	Deck I Deck II	Head azimuth adjustment screw (Fig. 2-3)	TAPE TEST POINT (L, Rch) (AF Assy)	Max. playback signal level	After adjustment, apply silicon bond to the head azimuth adjustment screw.

2. Playback Level Adjustment

- Since this adjustment determines playback Dolby NR level, perform it carefully.

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	PLAY	STD-331E test tape (Playback: 315Hz, 0dB)	Deck I Deck II	VR4203 (Lch) VR4204 (Rch) VR4201 (Lch) VR4202 (Rch)	TAPE TEST POINT (L, Rch) (AF Assy)	– 4.2 dBV	

Note: Please execute playback level adjustment always in the order of deck I → deck II.
When deck I has been adjusted, always adjust deck II also.

■ Recording Adjustment

1. Bias Oscillation Frequency Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Load the STD–631 or STD–632 test tape and set the recording mode.	Deck I Deck II	———— T4351	———— Between Ⓐ point in Fig. 2-4 and GND.	Oscillation frequency to be 105.0kHz ±2kHz.	When the power is turned ON while the MEMORY button is depressed, the frequency will decrease 2 – 3 kHz.

2. Recording Bias Adjustment

- Since this adjustment affects recording bias, prevent distortion from increasing due to underbias.

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the AUX/ CD II terminal and set the input selector to AUX/CD II.	Deck I Deck II	—— Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	– 25.2 dBV	
2	NORMAL	REC→ PLAY	Load the STD-631 or STD-632 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below)	Deck I Deck II	—— VR4351 (Lch) VR4352 (Rch)	TAPE TEST POINT (L, Rch) (AF Assy)	Repeat adjustment until playback level of the 10kHz signal is within 0±0.5dB from that of the 315Hz signal.	

Note: Set the 10kHz input signal level to the same value as the 315Hz input signal level of step 1.

3. Recording Level Adjustment

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the AUX/CD II terminal and set the input selector to AUX/CD II.	Deck I Deck II	Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	– 8.2 dBV	
2	NORMAL	REC → PLAY	STD-631 or STD-632 test tape and record/playback the 315Hz signal.	Deck I	——	TAPE TEST POINT (L, Rch) (AF Assy)	Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes -8.2dBV.	
				Deck II	VR4301 (Lch) VR4302 (Rch)			

4. ALC Operation Check

Step	Tape Selector (AUTO)	Mode	Input Signal/Test Tape	Adjusting Points	Measurement Points	Adjustment Value	Remarks
1	NORMAL	REC	Input a 315Hz signal to the AUX/CD II terminal and set the input selector to AUX/CD II.	Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	– 8.2 dBV	
2				Set to a level +10 dB above the input level at step 1.		Confirm that the reading is -3.2±2.5dBV.	

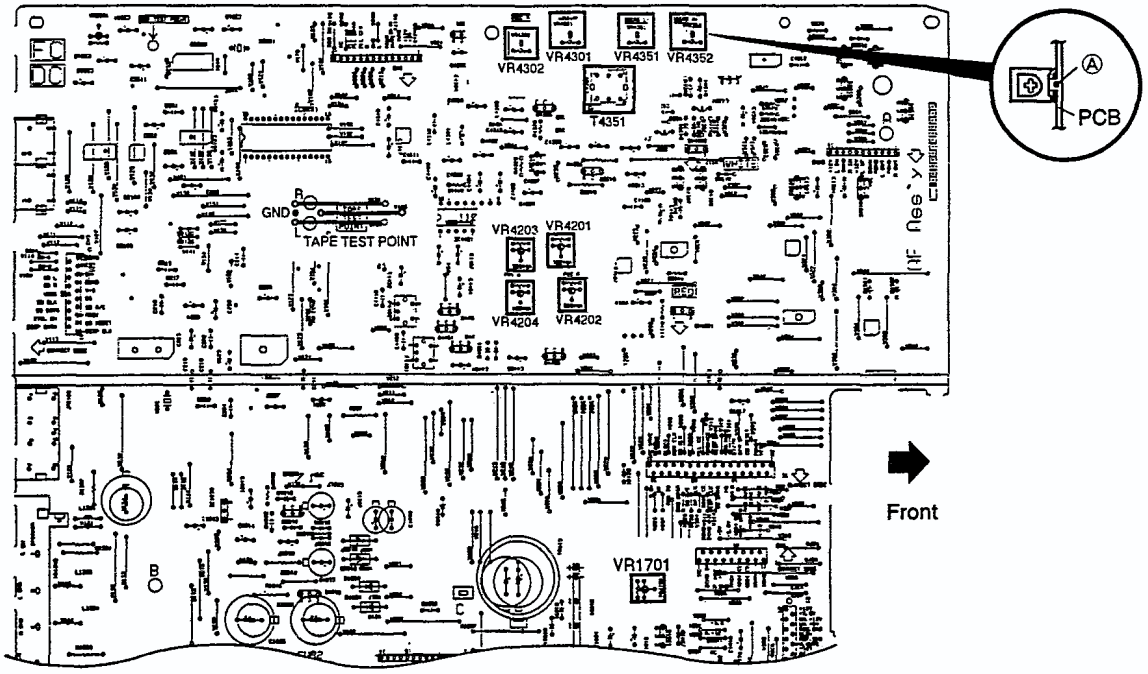


Fig. 2–4 Adjustment and Measurement points

5.3 POWER AMP MODULE SECTION (Refer to Fig . 3–1.)

1. Handling Precautions

- Since the heat sink and transistor metallic parts are connected to the Front Amp output, make sure they do not contact the GND (chassis) or other circuits.
- Since there is residual high voltage in the Power Amp Module ±B1 (FRONT 100W ASSY) and ±B2 (REGULATOR ASSY) even when the power is OFF, caution should be exercised. (If necessary, the voltage should be discharged).
- When handling the Power Amp Module, make sure you do not touch the fan motor blade.

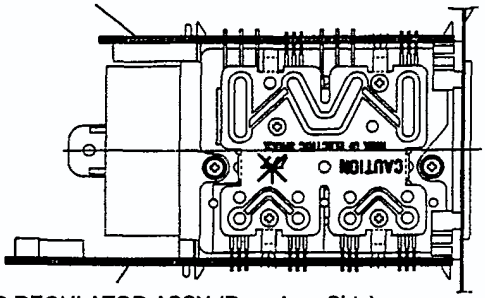
2. Adjustment and Confirmation of Idle Current

- Basically, the idle current needs to be confirmed when replacing a power transistor, driver transistor, or bias transistor, or when the entire split board Assy of the Power Amp Module has been replaced.
- Make sure the heat sink has cooled sufficiently before measuring the idle current. (Temperature should be the same as room temperature; 25°C is ideal, if possible.)
- Idle current stipulated value: 3–100mA.

■ Front Amp Side (FRONT 100W ASSY)

Step	Measurement	Item	Remarks
1	Lch side	Insert a resistor (0.22 Ω, 3W or more) in series in the connector CN7502 +B1 (or–B1) line (terminal No. 5 or 6). (Refer to Fig. 3–2.)	For measuring voltage at both sides of resistor
2		Short both sides of C7524.	Do not operate Rch side.
3		Turn the power ON, wait 6 seconds, and then measure the resistance voltage in Step 1.	Lch Idle current I=V/0.22 (Ω)
4	Rch side	• Same as Step 1 above. • Short both sides of C7523.	Do not operate Lch side.
5		Turn the power ON under the above conditions, and after 6 seconds measure the resistance voltage in Step 1.	
6	——	If the measured idle current is greater than 100mA, perform the following procedure.	
7	Lch side	Short between the Point Ⓐ pattern in Fig. 3–3 using solder.	Connect R7517 to R7515 in a parallel circuit.
8	Rch side	Short between the Point Ⓑ pattern in Fig. 3–3 using solder.	Connect R7518 to R7516 in a parallel circuit.
9	——	After performing Steps 7 and 8, remeasure the idle current and confirm that it is below 100mA.	
10	——	If the idle current is below 3mA, perform the following procedure.	
11	Lch side	Short between the point Ⓒ pattern in Fig.3–3 using solder.	Connect R7551 to R7519 in a parallel circuit.
12	Rch side	Short between the point Ⓓ pattern in Fig.3–3 using solder.	Connect R7552 to R7520 in a parallel circuit.
13	——	After performing step 11 and 12, remeasure the idle current and confirm that it is greater than 3mA (within 3–100mA).	

FRONT ASSY FOR 100W (Front Amp Side)



REAR REGULATOR ASSY (Rear Amp Side)

Fig. 3-1 PCB Location of Power Amp Module

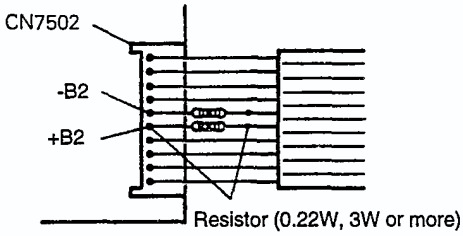


Fig. 3-2 FRONT 100W ASSY

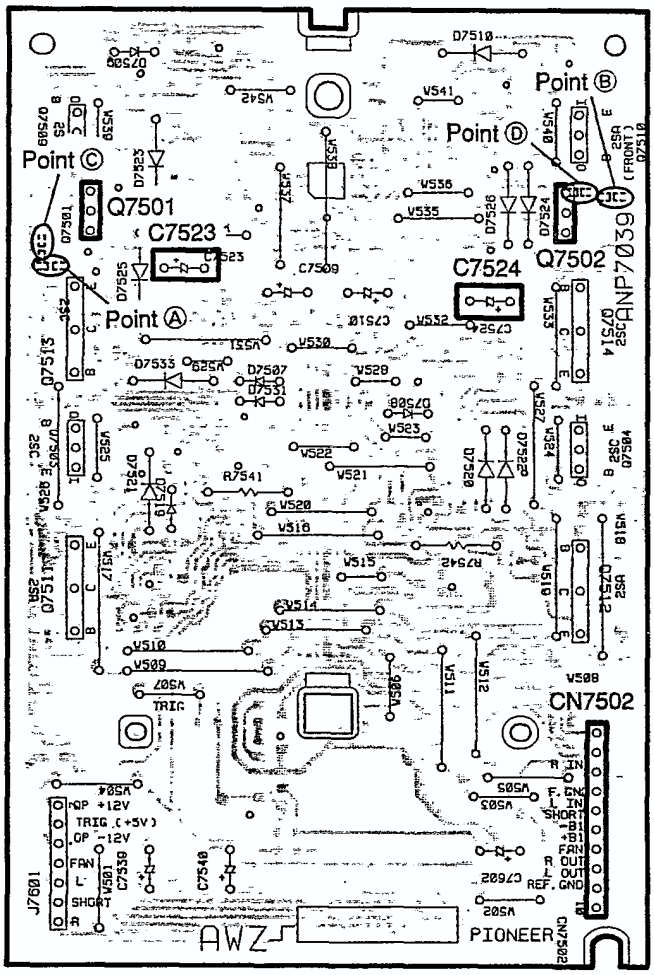


Fig. 3-3 FRONT 100W ASSY

3. Adjusting the Operating Temperature Setting of the Fan Motor (VR7201)

This adjustment is necessary when IC7401 (+12V regulator), Q7301 and Q7302 (temperature sensors), IC7201 (protection IC) or VR7201 has been replaced, or when the entire split board Assy of the Power Amp Module has been replaced.

■ Adjustment-Related Cautions

- Make sure the heat sink has sufficiently cooled (is the same as room temperature Ta.)
- Once the power has been turned ON, make measurements and adjustments as quickly as possible. (If too much time is taken, the heat sink temperature will rise, and the measurements will deviate from the Ta measurement point.)

■ Adjustment

1. Connect a voltmeter between VTEMP and VL (or between IC7201 terminals No.9 and 7). (Refer to Fig. 3–4.)
2. Determine the fan motor operating temperature setting by means of the following formula. (Tolerance is within ±30mV.)
   Formula: (75°C – Ta) X 19 (mV)
   Ta: ambient temperature (°C)
3. Adjust VR7201 so that the voltage between VTEMP and VL is the value obtained from the above formula.
   For example:
   when the room temperature is 25°C,
   set value = (75 – 25) X 19 (mV)
   = 950mV (tolerance within ±30mV).

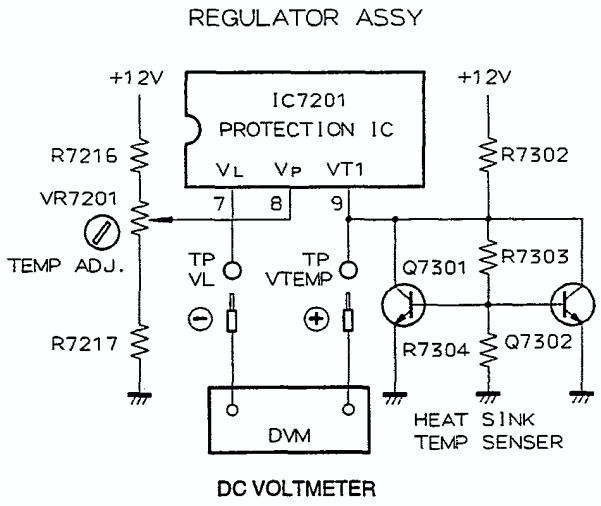
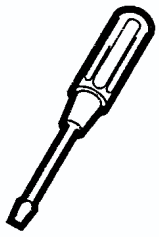
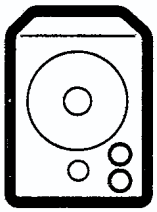
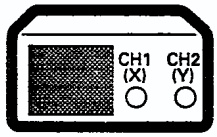
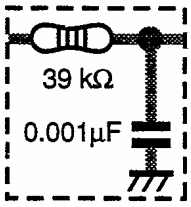


Fig. 3-4 Adjustment of Operating Temperature Setting of Fan Motor

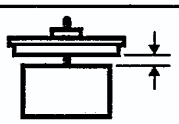
5.4 CD SECTION (CD部の調整)

1. PREPARATIONS (準備)

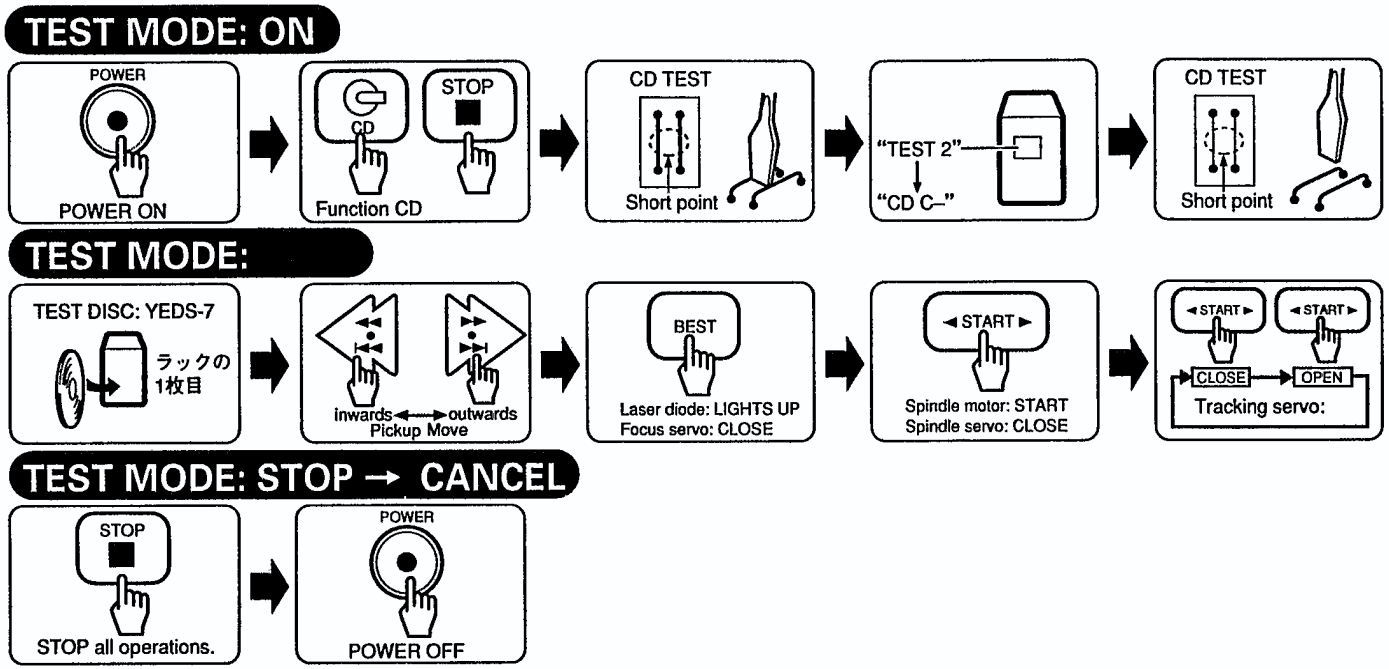
1.1 Jigs and Measuring Instruments (使用測定器/治工具類)

CD TEST DISC (YEDS-7)	⊖ Precise screwdriver	 ⊖ screwdriver (small)	⊕ screwdriver (medium)
⊕ screwdriver (large)	 Low-frequency oscillator	 Dual-trace oscilloscope (10 : 1 probe)	 Low pass filter (39 kΩ + 0.001μF)

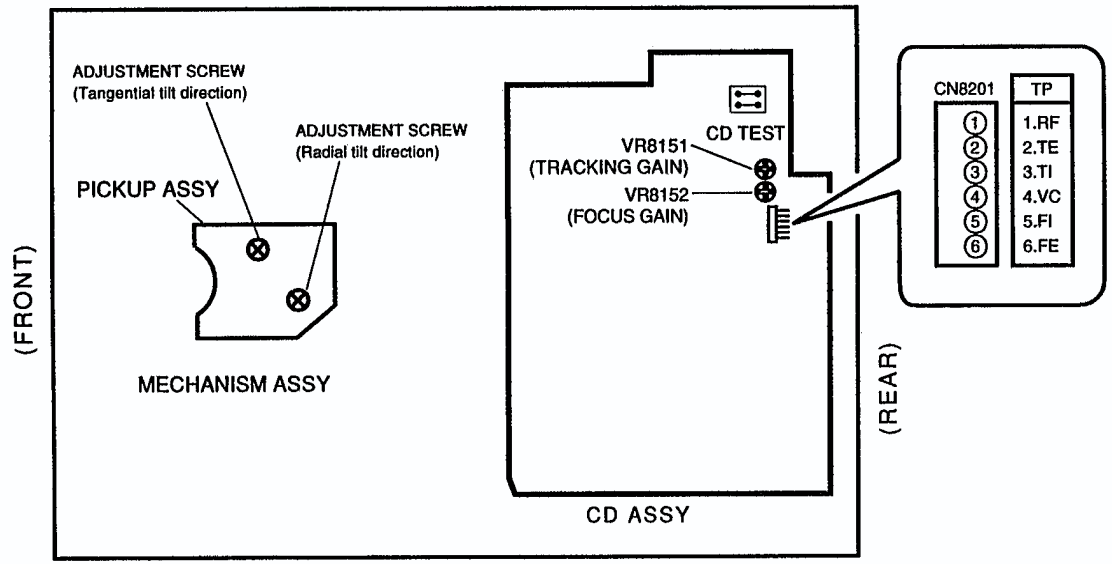
1.2 Necessary Adjustment Points (調整に必要な項目)

When (このような時)	Adjustment points
Exchange PICKUP (ピックアップを交換した時)	1.2.3.4.5.6. → Page 75~77
Exchange CD ASSY (CD ASSYを交換した時)	1.2.3.4.5.6. → Page 75~77
Exchange SERVO MECH ASSY (サーボメカ ASSYを交換した時)	1.2.3.4.5.6. → Page 75~77
Exchange SPINDLE MOTOR (スピンドルモーターを交換した時)	 ADJ → Page 19

2.1 How to Start/Cancel Test Mode （テストモードの設定/解除）

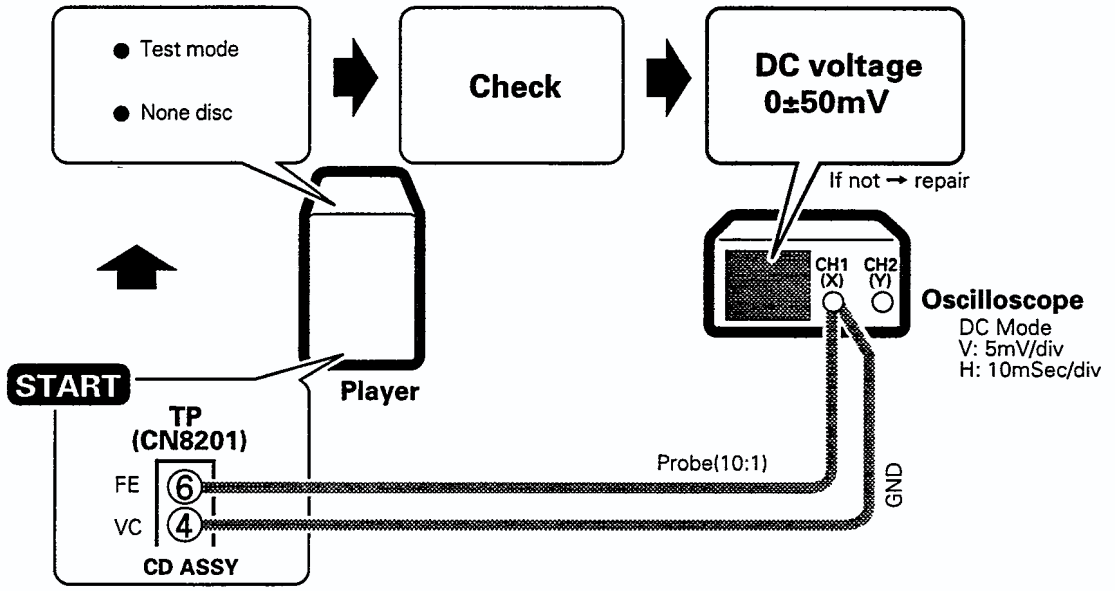


2.2Adjustment Locations（テストポイントと調整用VRの位置）

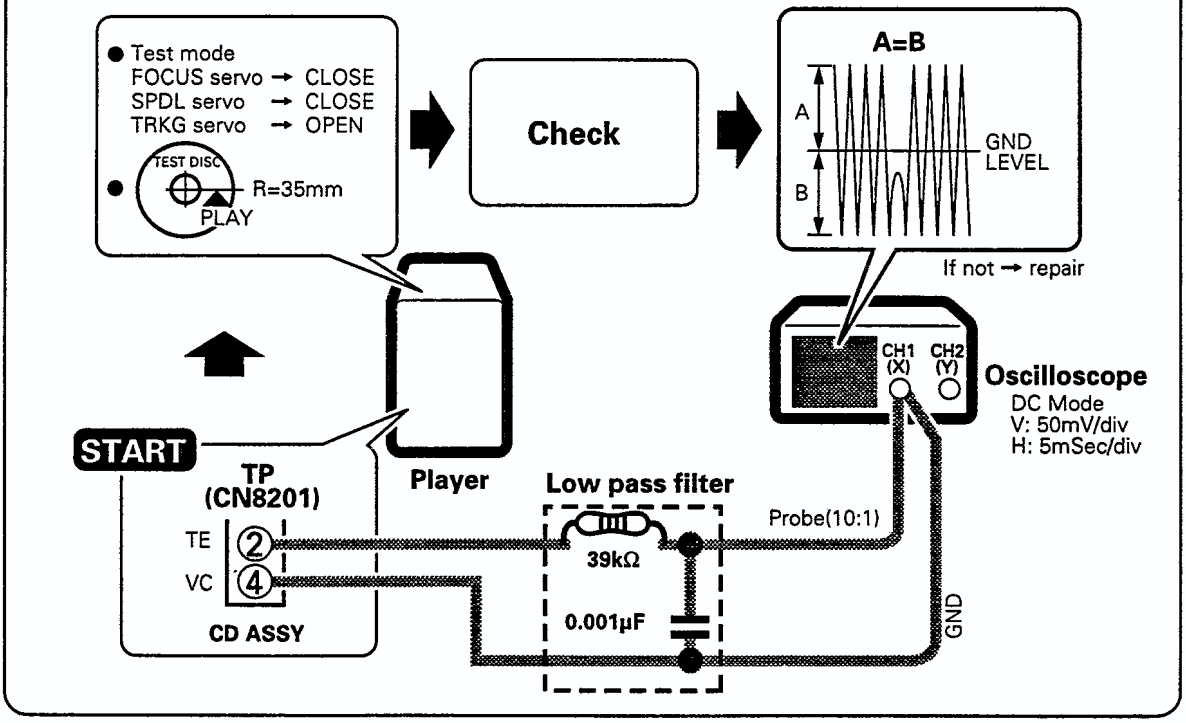


2.3 Check and Adjustment (確認、調整)

1. Focus Offset Check
(フォーカスオフセット確認)

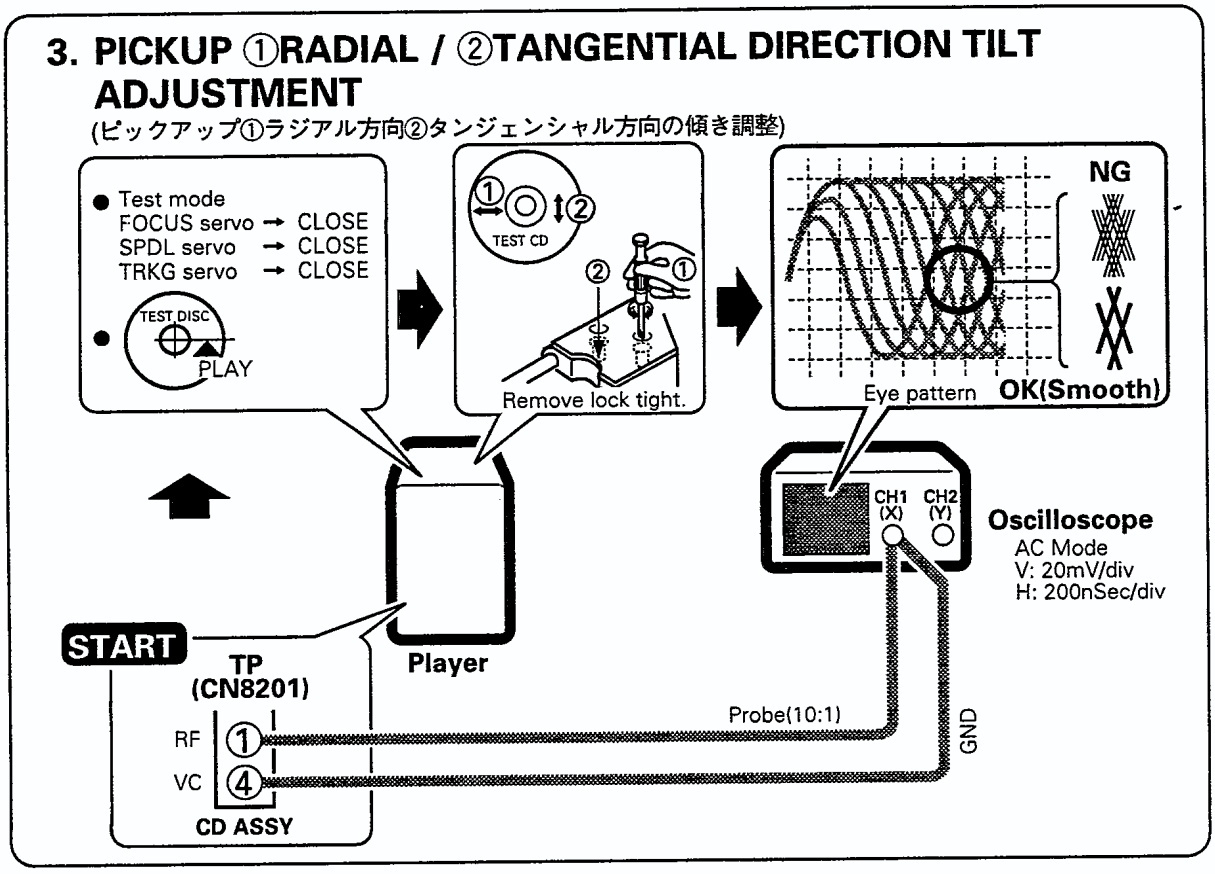


2. Tracking Error Balance Check
(トラッキングエラーバランス確認)



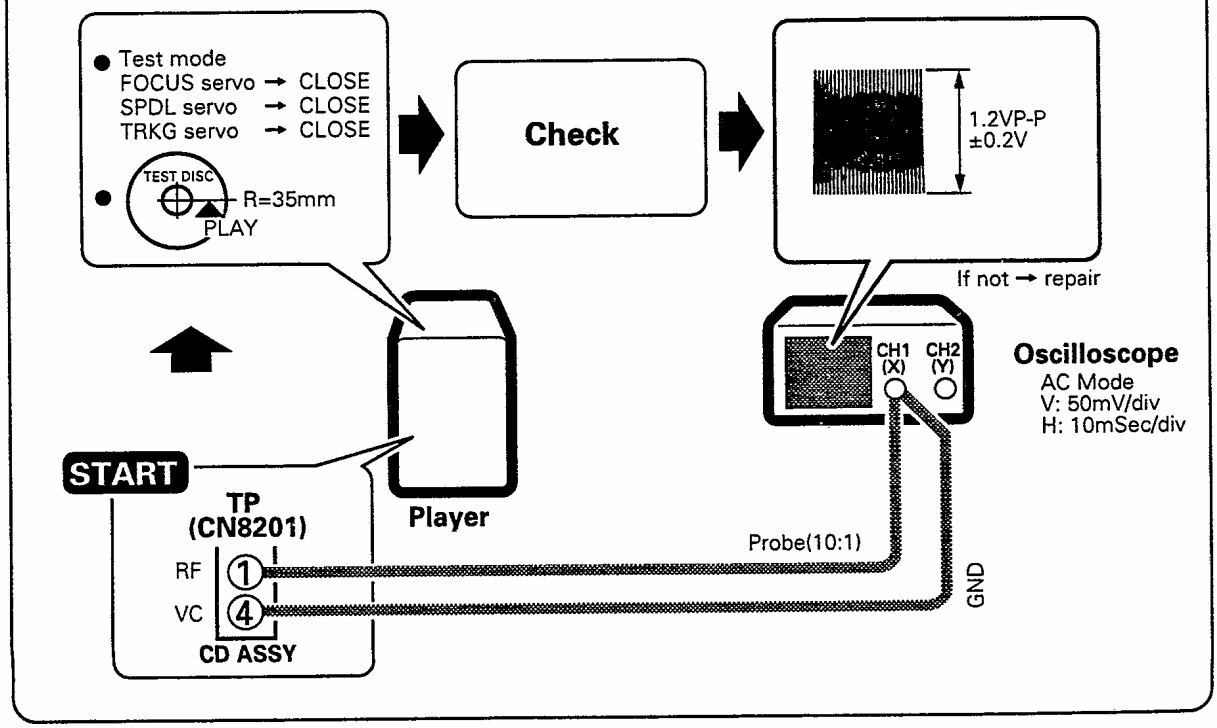
3. PICKUP ①RADIAL / ②TANGENTIAL DIRECTION TILT ADJUSTMENT

(ピックアップ①ラジアル方向②タンジェンシャル方向の傾き調整)

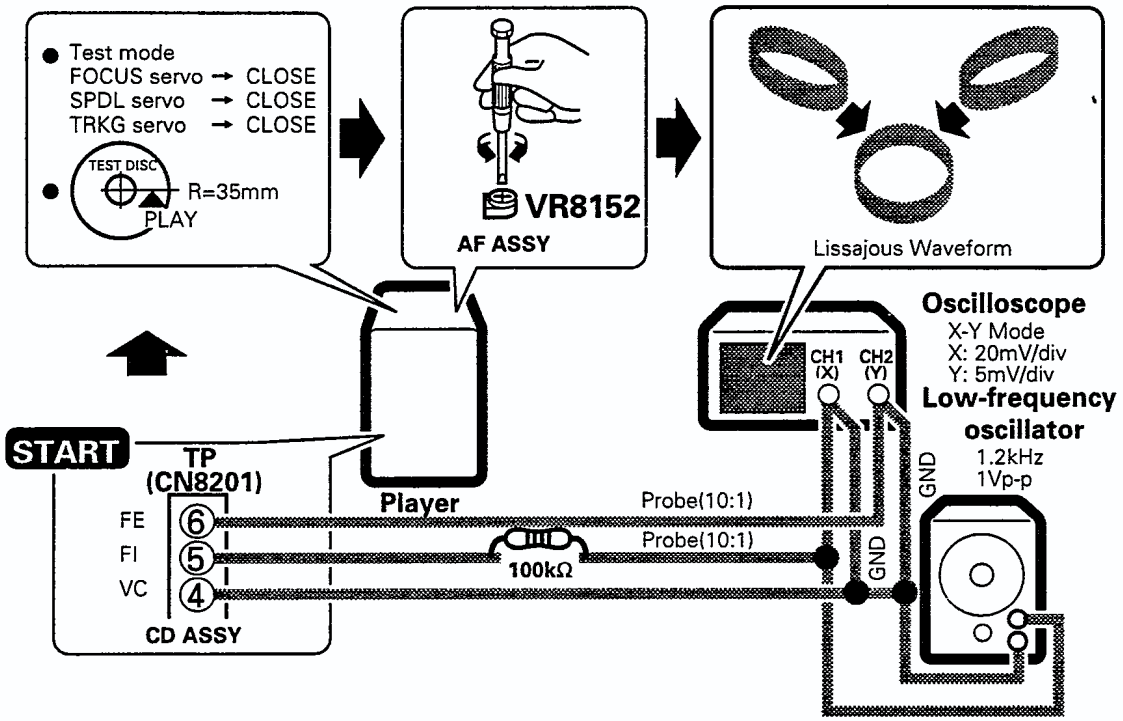


4. RF LEVEL CHECK

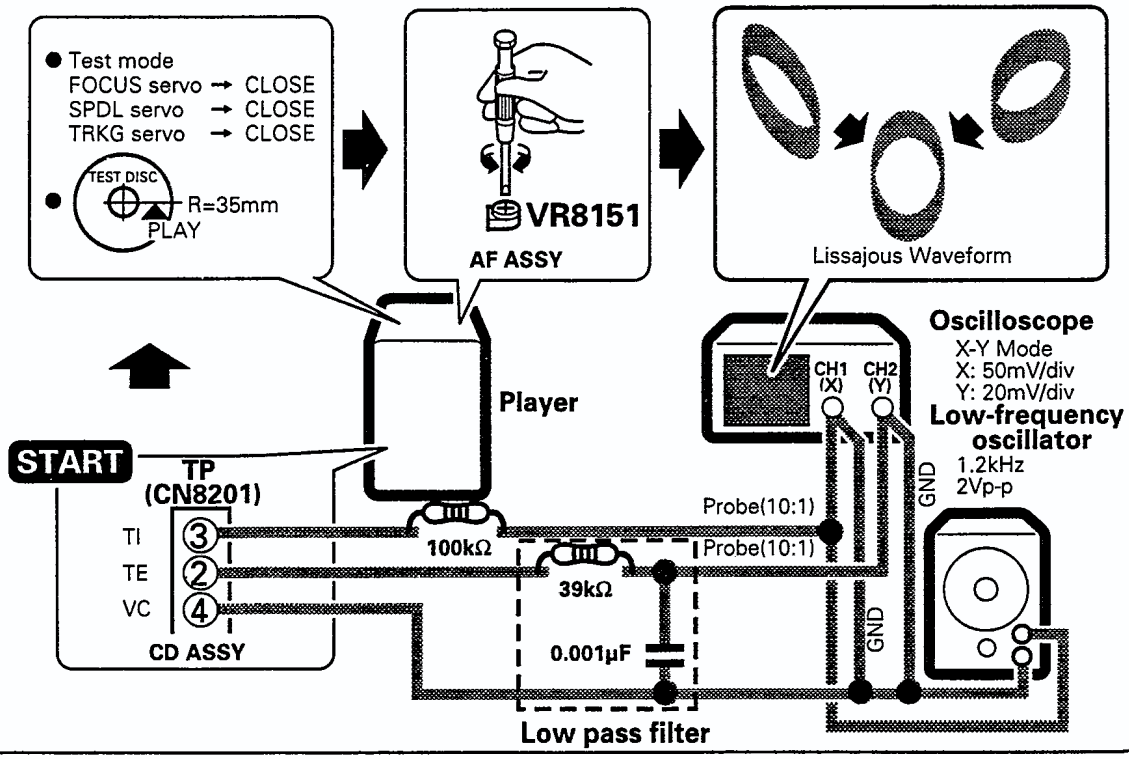
(RFレベル確認)



5. Focus Servo Loop Gain Adjustment
(フォーカスサーボループゲイン調整)



6. Tracking Servo Loop Gain Adjustment
(トラッキングサーボループゲイン調整)



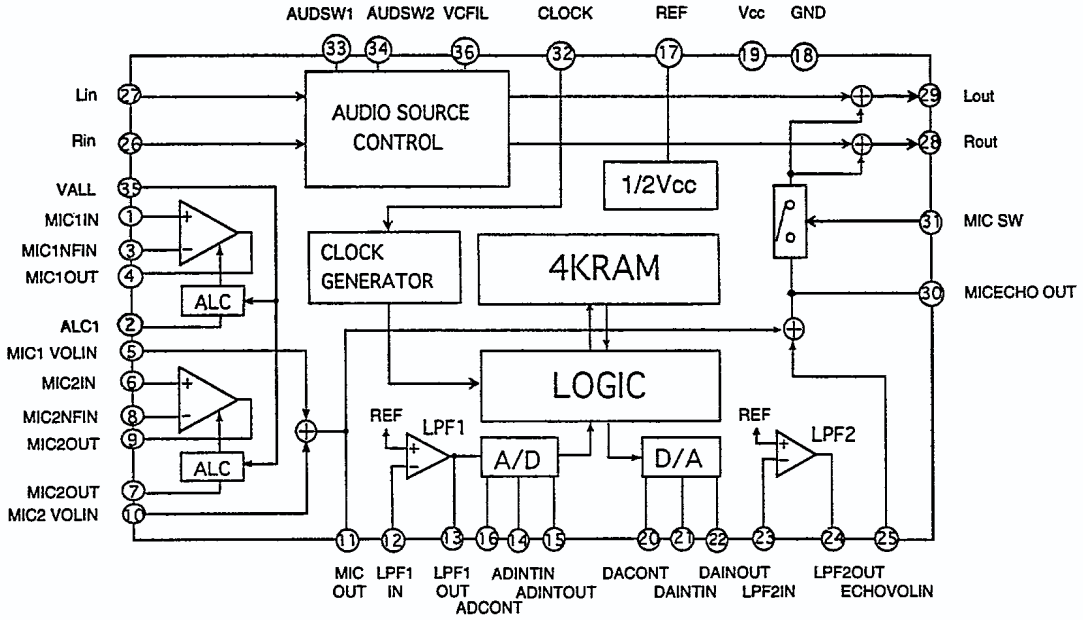
6. IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

■ M65845FP (IC251 : AF ASSY)

● DIgital Echo (built-in Mic Mixing Circuit)

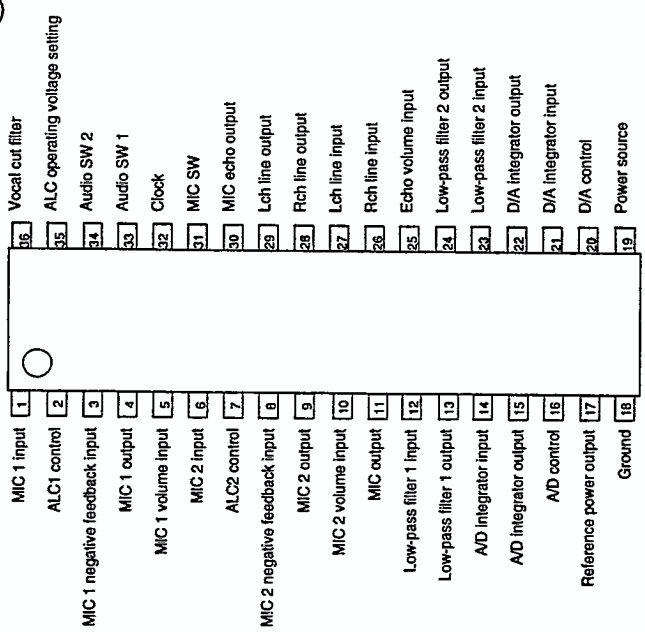
● Block Diagram



● Pin Function

No.	Pin Name	Pin Function	Description
1	MIC1IN	MIC 1 input	Connects MIC 1.
2	ALC1	ALC1 control	Connects condenser for setting ALC attack/recovery time.
3	MIC1NFIN	MIC 1 negative feedback input	Sets MIC 1 amp gain according to feedback circuit.
4	MIC1OUT	MIC 1 output	
5	MIC1VOLIN	MIC 1 volume input	Input after attenuation at outside MIC volume
6	MIC2IN	MIC 2 input	Connects MIC 2.
7	ALC2	ALC2 control	Connects condenser for setting ALC attack/recovery time.
8	MIC2NFIN	MIC 2 negative feedback input	Sets MIC 2 amp gain according to feedback circuit.
9	MIC2OUT	MIC 2 output	
10	MIC2VOLIN	MIC 2 volume input	Input after attenuation at outside MIC volume
11	MICOUT	MIC output	MIC 1 and MIC 2 mixing output
12	LPF1IN	Low-pass filter 1 input	Pre-filter before A/D conversion for digital echo
13	LPF1OUT	Low-pass filter 1 output	
14	ADINTIN	A/D integrator input	Configures integrator for A/D conversion according to outside condenser.
15	ADINTOUT	A/D integrator output	

● Pin Assignment (Top View)



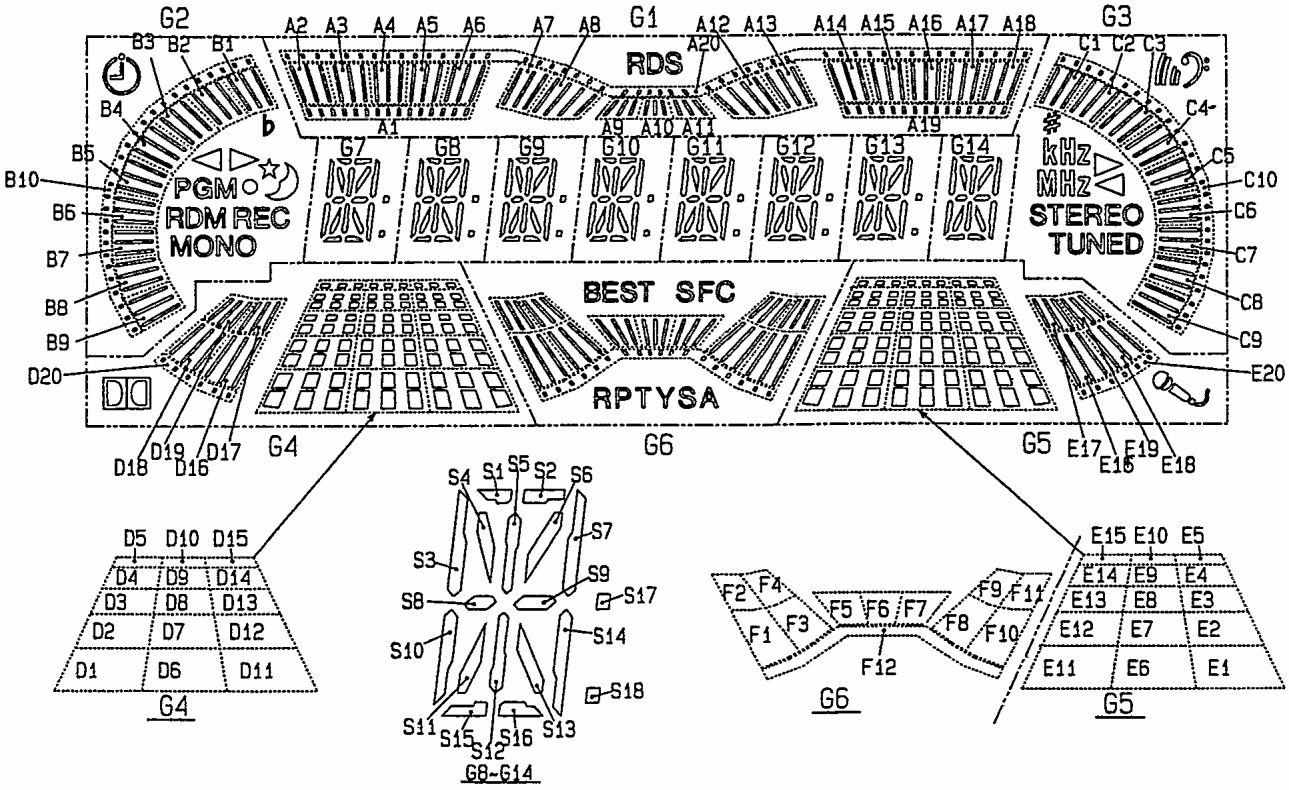
No.	Pin Name	Pin Function	Description
16	ADCONT	A/D control	Sets adaptive time constant of ADM method A/D conversion.
17	REF	Reference power output	Connects 1/2 Vcc output and filter condenser.
18	GND	Ground	
19	Vcc	Power source	
20	DACONT	D/A control	Sets adaptive time constant of ADM method D/A conversion.
21	DAINTIN	D/A integrator input	Configures integrator for D/A conversion according to outside condenser.
22	DAINTOUT	D/A integrator output	
23	LPF2IN	Low-pass filter 2 input	Post-filter before D/A conversion for digital echo
24	LPF2OUT	Low-pass filter 2 output	
25	ECHOVOLIN	Echo volume input	Input after attenuation at outside MIC volume
26	RLINEIN	Rch line input	
27	LLINEIN	Lch line input	
28	RLINEOUT	Rch line output	MIC system and line system mixing output
29	LLINEOUT	Lch line output	
30	MICECHOOUT	MIC echo output	MIC source audio and echo mixing output
31	MICSW	MIC SW	L: MIC OFF H: MIC ON
32	CLOCK	Clock	CR oscillator: Built-in buffer for oscillation
33	AUDSW1	Audio SW 1	Audio selector switch: Switches audio signals through operation of audio switches 1 and 2 to L and H settings.
34	AUDSW2	Audio SW 2	
35	VALC	ALC operating voltage setting	Sets ALC operating voltage according to applied voltage value.
36	VCFIL	Vocal cut filter	Changes frequency components lower than vocal band to Through signals.

7. FL INFORMATION

■ AAV7021 (V1901: DISPLAY ASSY)

● FL Tube

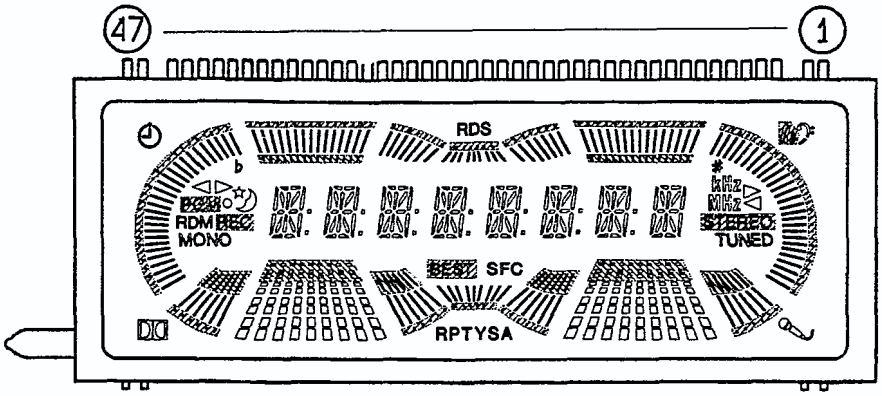
● Grid and Segment assignment



● Anode Connection

	G1	G2	G3	G4	G5	G6	G7~G14
S1	A1	B1	C1	D1	E1	F1	S1
S2	A2	B2	C2	D2	E2	F2	S2
S3	A3	B3	C3	D3	E3	F3	S3
S4	A4	B4	C4	D4	E4	F4	S4
S5	A5	B5	C5	D5	E5	F5	S5
S6	A6	B6	C6	D6	E6	F6	S6
S7	A7	B7	C7	D7	E7	F7	S7
S8	A8	B8	C8	D8	E8	F8	S8
S9	A9	B9	C9	D9	E9	F9	S9
S10	A10	B10	C10	D10	E10	F10	S10
S11	A11	◁	kHz	D11	E11	F11	S11
S12	A12	▷	MHz	D12	E12	F12	S12
S13	A13	○	▷	D13	E13	BEST	S13
S14	A14	☆	◁	D14	E14	SFC	S14
S15	A15	PGM	STEREO	D15	E15	R	S15
S16	A16	RDM	TUNED	D16	E16	P	S16
S17	A17	REC	♯	D17	E17	T	S17
S18	A18	MONO	𝄢	D18	E18	Y	S18
S19	A19	♭	𝅗𝅥	D19	E19	S	
S20	A20	🕘	𝅘𝅥	D20	E20	A	
S21	RDS			DIO			

● Pin Assignment



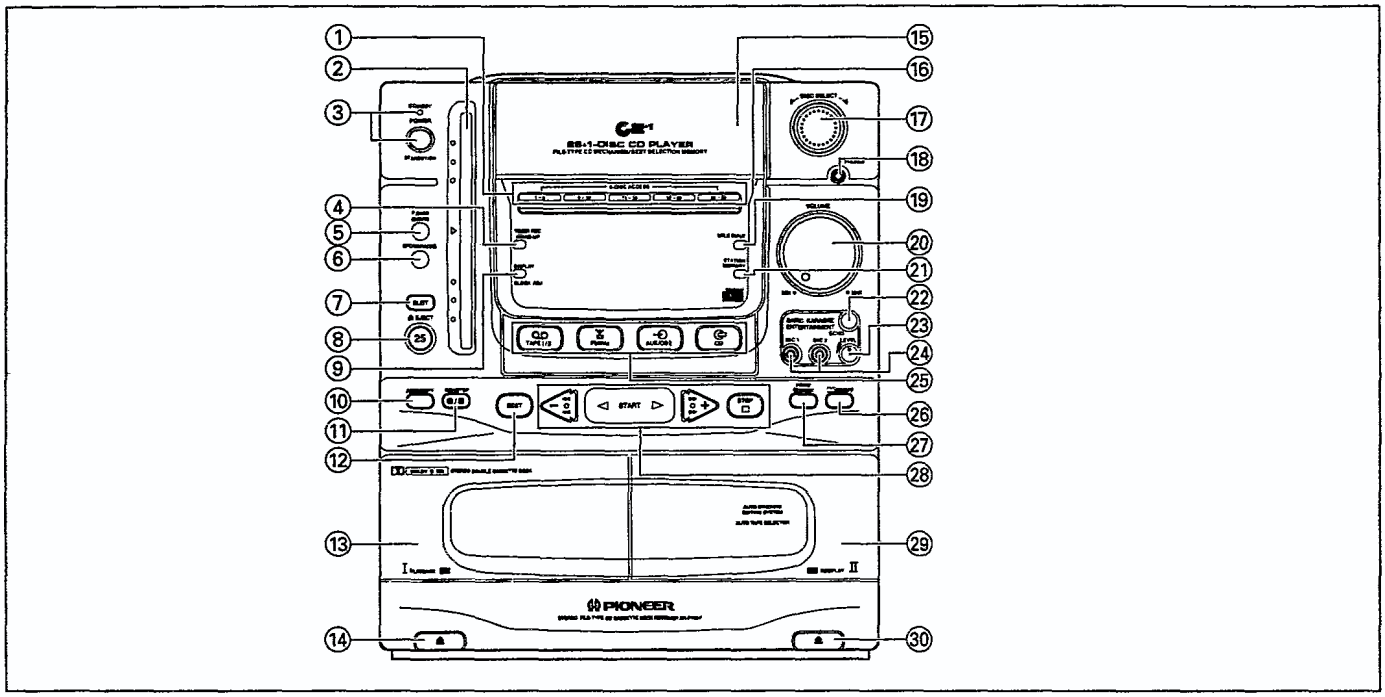
● Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assignment	F1	F1	NP	NL	NL	G14	G13	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1	NL	S21	S20	S19	S18

Pin No.	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Assignment	S17	S16	S15	S14	S13	S12	S11	S10	S9	S8	S7	S6	S5	S4	S3	S2	S1	NL	NL	NL	NP	F2	F2

F1, F2:Filament G1~G14:Grid S1~S21:Anode NP:No Pin NL:No Lead

8. PANEL FACILITIES



① 5-DISC ACCESS button

② Plus 1 disc slot

③ POWER STANDBY/ON switch and STANDBY indicator
This is the switch for electric power.
ON : When set to the ON position, power is supplied and the unit becomes operational.
STANDBY : When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. (The STANDBY indicator lights.)

④ TIMER REC/WAKE-UP button

⑤ P.BASS (DEMO) button

⑥ SFC/KARAOKE button
Each time this button is pressed, the mode changes in the following sequence:

HALL → LIVE → DISCO → MOVIE → KARAOKE → off → HALL

NOTE:
If KARAOKE is selected, the vocal part in songs is muted and only the instrumental accompaniment (backup) is played.

⑦ SLOT EJECT button

⑧ 25 EJECT button

⑨ DISPLAY CLOCK ADJ button (U.S., Canadian and Australian models) DISPLAY/RDS CLOCK ADJ button (European and U.K. models)

⑩ ASES/COPY button

⑪ REC/STOP button (●/■)

⑫ BEST button

⑬ TAPE I cassette door

⑭ TAPE I Eject button (▲)

⑮ Hood

⑯ Door panel

⑰ DISC SELECT knob

⑱ Headphones jack (PHONES)

⑲ TITLE INPUT button

⑳ VOLUME control

㉑ STATION MEMORY button

㉒ ECHO level control (Australian model only)

㉓ Microphone level (LEVEL) (Australian model only) Microphone level (MIC LEVEL) (U.S., Canadian and European models)

㉔ Microphone jack 1, 2 (MIC 1, 2) (Australian model only) Microphone jack (MIC) (U.S., U.K., Canadian and European models)

㉕ Function buttons

㉖ Dolby* NR ON/OFF button
Each time this button is pressed, the Dolby NR system turns on and off.

㉗ FREQ/STATION button

㉘ Common operation button section (Refer to page 83.)

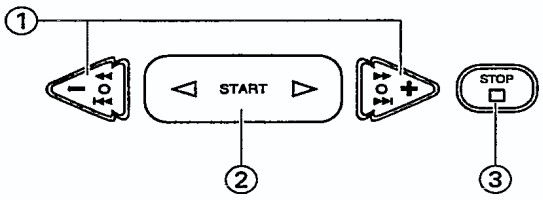
㉙ TAPE II cassette door

㉚ TAPE II Eject button (▲)

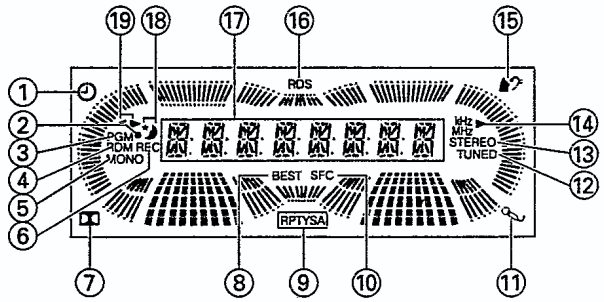
*

- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*

Common operation button section



Display



① ◁, ▷ buttons

② START button (◄ ►)

③ STOP button (■)

- **Roles of the common operation buttons (The roles of the buttons vary depending on the input functions as shown below.)**

During CD input

START	: Play/pause button
STOP	: Stop button
▷	: Fast forward/track search button
◁	: Fast reverse/track search button

During cassette deck input

START	: Play button/Tape transport direction
STOP	: Stop button
▷	: Fast forward/Review button
◁	: Rewind/Review button

During tuner operation

▷	: Frequency Up button
◁	: Frequency Down button

① **Lights when setting the timer.**

② **Lights when setting the Beat Cut function.**

③ **Lights when you press the PGM button.**

④ **Lights when you press the RANDOM button.**

⑤ **Lights when you press the MONO button.**

⑥ **Lights during recording and timer recording operation.**

⑦ **Lights when Dolby NR is ON.**

⑧ **Flashes during Best Selection setting, and lights during play.**

⑨ **RPT : Lights during repeat play.**
S : Lights during SINGLE mode operation.
A : Lights during ALL mode operation.
RT : Lights during RT mode operation (European models only).
PS : Lights during PS mode operation (European models only).
PTY : Lights during PTY mode operation (European models only).

⑩ **Lights during SFC mode operation.**

⑪ **Lights during KARAOKE mode operation.**

⑫ **Lights during radio broadcast reception.**

⑬ **Lights during FM stereo reception.**

⑭ **Lights during CD play. (Flashes in pause mode.)**

⑮ **Lights when you press the P.BASS button.**

⑯ **Lights during RDS mode operation. (European and U.K. models only)**

⑰ **Indicates frequency and major operation status.**

⑱ **Lights during sleep timer operation.**

⑲ **Lights to show TAPE II tape direction.**

9. SPECIFICATIONS

■ STEREO FILE-TYPE CD CASSETTE DECK RECEIVER: XR-P760F

Amplifier Section
<U.S. and Canadian models>
Continuous average power output is 100 watts* per channel, min., at 8 ohms from 60 Hz to 15,000 Hz with no more than 1.0 % total harmonic distortion.**

Continuous Power Output (FTC) ..... 100 W + 100 W
(U.S. and Canadian models)
(RMS) ..... 100 W + 100 W
(1 kHz, T.H.D. 10 %, 8 Ω)
(PMPO) ..... 1500 W (Australian model)

• *Above specifications are for when power supply is 230 V.*

FM Tuner Section
Reception frequencies ..... 87.5 MHz to 108 MHz
Antenna input ..... 75 Ω unbalanced

AM Tuner Section
Reception frequencies ..... 531 kHz to 1,602 kHz (9k)
530 kHz to 1,700 kHz (10k)
Antenna ..... Loop antenna (included)

Double Cassette Deck Section
System type ..... 4-track, 2-channel stereo
Heads ..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor ..... DC servo motor x 1
Frequency response
Type II (High/CrO_2) tape ..... *35 Hz to 15,000 Hz ±6 dB
(recorded at –20 dB)
Type I (Normal) tape ..... *35 Hz to 14,000 Hz ±6 dB
(recorded at –20 dB)
SN ratio ..... *56 dB
(peak recording level, audible compensation)
Dolby B type NR on ..... 10 dB compensation at 5 kHz

* Values measured in accordance with EIAJ standards.

■ FILE TYPE CD PLAYER

Type ..... Compact disc audio system
Usable discs ..... Compact audio discs
Channels ..... 2 channels (stereo)
Program steps ..... 32 steps maximum

■ ELECTRICAL REQUIREMENTS, ETC.

Power Requirements
U.S., Canadian models ..... AC 120 V, 60 Hz
Australian model ..... AC 240 V, 50 Hz
Power Consumption
U.S. model ..... 255 W
Canadian model ..... 390 VA
Australian model ..... 490 W
External dimensions ..... 260 (W) x 315.7 (H) x 366.7 (D) mm
10-1/4 (W) x 12-7/16 (H) x 14-7/16 (D) in.
Weight ..... 11 kg (24 lb 5 oz)

■ ACCESSORIES

Operating Instructions 1
FM T-type antenna 1
AM loop antenna 1
Remote control unit 1
AAA/R03 dry cell batteries 2
Speaker cords (supplied with speaker system) 2
CD case stand 1

NOTE:
Specifications and design are subject to possible modifications without notice, due to improvements.

* Measured pursuant to the Federal Trade Commissions's. Trade Regulation rule on Power Output Claims for Amplifier.
** Measured by audio spectrum analyzer.